

and not the Essence, imports a Ratio of Principle. Whence St. Thomas (not the Apostle) observes, that that Order is called Order of Nature, not that Nature itself properly orders it, but because the Persons are ordered according to the natural Origin.

From what we have said here, that that Order is not an Order of Causality, or Dependency, or Duration, or Term, or Dignity, or Situation, &c. since such an Order would argue some Imperfection in God;

I answer, 2. That in God there is no Priority, or Posteriority, properly taken, but improperly only.

I prove the first Part, viz. that there is no Priority or Posteriority, properly said, in God.

1. From the Symbol of St. Athanasius, where it is said, that in the Mystery of the blessed Trinity, there is nothing prior or posterior, nothing greater or lesser, but the three Persons are coeternal and coequal.

2. By the Fathers, particularly St. Augustin, lib. 3. cont. Maxim. c. 14. where he says, that there is no Inequality of Substance, but an Order of Nature; not that one be prior to the other; but that one is from the other.

3. By Reason, because if there was some Priority properly said in God, it would be either a Priority *in quo*, or a Priority *à quo*; but neither is in God: Not a Priority *in quo*, as it appears by itself, because Priority *in quo*, is that whereby one is prior to the other by Situation, or Time: But such a Priority cannot be found in God, since all the Persons are immense and eternal: Therefore, &c. Nor likewise the Priority *a quo*, properly said, which is also accounted a Priority of Nature; since that Priority is that whereby one Thing precedes the other, which depends of it; but that Priority cannot be in God, because one Person does not depend on the other. For if he was dependant of another, it would be conceived dependant, either by reason of Relation or of Essence; which cannot be said; not the former, because the related are together by Nature: Nor likewise the latter, because the three Persons have but one Essence, and the same Thing cannot properly depend on itself.

I prove the second Part, that in God there is some Priority improperly so called; for there is a Priority of Origin, which though real in God, cannot be properly called, notwithstanding, a Priority, since it has not the Ratio of a Priority properly so called. Whence St. Thomas chose rather to call that Priority in God, an Order of Nature according to Origin, than a Priority.

We'll ask next, if there be a Circumcession of Persons in God; and what is understood by Circumcession?

Which to answer pertinently, we must observe, that by the Name of Circumcession, is understood an intimate Inexistence of the divine Persons in themselves mutually: Wherefore two Things are required for it, 1. The Identity of Essence, or *ὁμοουσία*, i. e. Consubstantiality. 2. A Distinction of Persons.—These pre-observed,

I answer, that there is a Circumcession of Persons in God; which I prove by the Scripture, the Fathers, and by Reason.

By the Scripture, John xiv. Philip, he that has seen me, has seen the Father: believeth thou not that I am in the Father, and the Father in me. Whence it is not surprizing, if the Church sings in that Hymn composed by St. Ambrose, The whole Son is in the Father, and the whole Father in the Word.

By the Fathers, particularly St. Hilary, lib. 7. de Trinit. and St. Fulgentius, lib. de fide ad Petrum, c. 1. in these Words, The whole Father is in the Son and the Holy Ghost, the whole Son is in the Father and the Holy Ghost, and the whole Holy Ghost in the Father and Son.

By Reason, because those Persons are within one another mutually, by Circumcession, or, as others express themselves, by Circuminsution, and Circumexistence, and Inhabitation, who have one and the same Essence, numerically, placed in an indivisible and impartible to which it is identified; but the divine Persons, though really distinct between them, have such an Essence, to which they are perfectly and really identified, therefore they are within one another mutually by Circumcession, &c.

I may be asked, how that happens that Persons thus really distinct between them by reason of the relative Opposi-

sition they have to one another, exist mutually within one another?

To which I answer, that it does not proceed from that those Persons are relatively opposed to one another, and distinguished, but from that they have one and the same indivisible and impartible Essence, with which they are one really and formally.

From what I have said it is inferred, that that Circumcession is founded in the Identity of Nature, and not in any other Thing; for, v. gr. it is not founded in that mutual Consequence of existing, which is found between Relatives, for by it follows that one Person existing, the other exists likewise, but it does not follow that one exists in the other: Neither is it founded in Origin, because though the Word requires to be in the saying, it does not require, notwithstanding, that the Saying should be in the Word, otherwise than intentionally. Lastly, it is not founded in Immensity, because though Immensity should be supposed precise, the Persons notwithstanding, should continue to be within one another, because of the Identity of the Essence to which all the Persons are identified.

We'll treat next, of the Predicability of the Things which are considered in God, and of the Manner of speaking of those Things which belong to the Mystery of the blessed Trinity: Asking first, whether essential Names can be predicated of the divine Persons; and vicissim, whether the divine Persons can be predicated of essential Names?

Which to answer pertinently, we must observe, 1. That by essential Names, are understood here those Names which are not relative, but absolute.

2. That of essential Names in God, some are concrete and others abstract.

3. That of concrete essential Names, some signify Essence substantively, as this Name, God, signifies it; and some adjectively, as these Terms, having the Deity, signify it. Which to understand better, you'll observe, that those Names are said to signify the Essence substantively, which signify some Form existing by itself: And those adjectively, which signify a Form by manner of Accident. These pre-observed,

I answer, 1. That the concrete and substantive essential Names are predicated, in the singular, of the three Persons, but not in the plural, v. gr. the Father, and Son, and Holy Ghost, are one God and one Creator, not three Gods, nor three Creators: Because such Names have but one single Form, v. gr. this Name, God, has but one Divinity, and Creator one Omnipotency; therefore they only can be said in the singular, of the three Persons, and not in the plural; since the Singularity and Plurality of concrete essential Names, substantively taken, is taken from the Singularity and Plurality of Forms.

I answer, 2. That the concrete essential Names, taken adjectively, are said in the plural, of the three Persons, v. gr. the Father, and Son, and Holy Ghost, are creating. Because in adjective Names, the Plurality and Singularity are taken from the Singularity and Plurality of the Suppositums, by reason that the Accidents have their Being in the Subject.

But, say you, are not the Father, the Son, and the Holy Ghost, called in the Symbol of St. Athanasius, one eternal and one immense, and not three eternal and three immense? And can we not then infer hence, that the adjective essential Names of the three divine Persons, are enounced likewise in the singular?

To which I answer by denying the Consequence; because immense and eternal are substantively taken in the Symbol of St. Athanasius, or if they be taken adjectively, the Name God, must be subunderstood, so as for the Sense to be, that the Father, and the Son, and the Holy Ghost, are one eternal God, and one immense God.

I answer, 3. That the Persons can be predicated of essential Names, either in concreto or in abstracto. Because between the Persons, or Personalities, or Relations, and the Essence, there is a real Identity, and there is no other Distinction but a virtual one; whence it can be rightly said, that the divine Essence, or God, are three Persons, Father, Son, and Holy Ghost.

We'll ask next, Whether the essential Names, considered either in concreto or abstracto, can suppose for the Person?

To which I answer, that the concrete essential Names can

some-

sometimes suppose for the Essence, and sometimes for the Person. Because whenever in some Enunciation the Subject is indifferent towards supposing, either for the Essence or for the Person, it can suppose for either, and be determined by either, since the Subject is determined by the Attribute. But in God the concrete essential Names are of that Kind, since they suppose neither the Essence alone, nor the Person alone: Therefore they sometimes suppose for the Essence, and sometimes for the Person, according as they are determined by something essential, or by something personal, which is like a Predicate. All this is illustrated by Examples, *v. gr.* this Name *God* supposes for the Essence in this Example, *God creates*, because the Predicate becomes the Subject in the Ratio of the Form signified. But it supposes for the Person in this Example, *God generates*, because the Predicate in this Example becomes the Subject in the Ratio of a Person, since to the Person belongs to generate, and to be generated, and not to the Essence.

I answer, 2. That an *abstract essential Name*, and particularly this Name *divine Essence*, or *Deity*, does not suppose for the Person: Because from such a Thing would follow a great Absurdity; for, *v. gr.* it would follow, that the divine Essence would be said to generate, and then there would be Diversity of Essence; for either the Essence would generate itself, or generate another Essence: But neither can be said; not the first, according to *St. Augustin, lib. 1. de Trinit. c. 1.* where he says, that there is not one Thing that generates itself, for nothing can have together the Ratio of Principle, and of Term. Nor the second, because according to *Euthimius, 1 part. Panopl. Titul. 7.* it does belong to the Person, not to Nature to generate.

It may be asked, *Whether the essential Names are to be appropriated to the Persons?*

Which I answer in the Affirmative, because the Scripture insinuates it in these Words, *1 Cor. i. We preach Christ*, says the Apostle, *the Virtue and Wisdom of God.* And because the Fathers attribute Omnipotency to the Father, Wisdom to the Son, and Love and Goodness to the Holy Ghost; which are all essential Attributes: Therefore, &c.

We'll answer next, some little Questions relating to the Manner of speaking of the Things which pertain to the Mystery of the blessed Trinity.

And ask, 1. *If the Name of Person be common to the three divine Persons, and that univocally?*

I answer in the Affirmative; because it is supposed so in the Councils, who either say that there are three Persons in God, or that other is the Person of the Father, other of the Son, and other of the Holy Ghost.

It is objected, that what is not communicable cannot be common; that a Person is not communicable, since of its Ratio it is incommunicable: Therefore that Name of Person, and the Ratio thereby signified is not common.

I answer by a Distinction of the Major. In the Affirmative, if by common is understood a Community of the Thing; and in the Negative, if it is understood a Community of Reason. The Minor and Consequence are distinguished likewise: For though the Person be uncommunicable, the Manner of existing incommunicably can, notwithstanding, be common to several.

It may be asked, 2. *If we can say a trine God?*

I answer by a Distinction; in the Affirmative, if by a trine Deity is understood a Deity subsisting in three Persons, and common to the three Persons. And negatively, if by a trine Deity are understood three Gods or three divine Essences. For this Rule is proposed by *St. Augustin, lib. 5. de Trinit. c. 8.* that whatever is said in God substantially, and *ad se*, is said in the singular, not in the plural Number: But the Deity is said substantially, and *ad se*; therefore it must be said in the singular, not in the plural; and therefore we must say one Deity, not a trine one.

It may be asked, 4. *If the Deity can be called triple?* Which I answer in the Negative, because that Word, according to the common Manner of speaking, imports a Diversity of Essence.

It is asked, 5. *If the Son of God can be said other from the Father?* Which I answer in the Affirmative, because

that Word *other* does not import a Diversity of Essence, but only a Diversity of Suppositum.

It is asked, 6. *If the Son be another Thing than the Father?* Which I answer in the Negative, because those Words *another Thing* import a Diversity of Nature; and the Son has not a Nature different from that of the Father: Therefore, &c.

From this I'll pass to the Mission of the divine Persons; and ask, first, *What is the Mission, particularly the passive one, of the divine Persons, and what Persons it becomes?*

To which I answer, that the passive Mission can be defined a Procession of a divine Person from some Habit to a Term, in which he begins to be in some new Manner, or such as he was not in before. Because a Mission must import two Sorts of Habits, one to the Principle sending, *i. e.* to the productive Principle, or to the Person originating: The other to the extrinseck Term, *i. e.* to the Person, or to the Place, where it begins to be in another Manner than it was there before, by Essence, Presence, and Power, or to operate in some Place where it did not operate, or to operate in another Manner than it operated before: Which double Habit is expressed in our Definition of Mission: Therefore, &c.

From that Definition it is inferred, 1. That the Mission of the divine Persons is distinguished from a simple Coming; because he that comes can come of himself; but he that is sent must come from another. Therefore *to come* may be proper to the divine Father, but not to be sent. Whence we read *John xiv. We'll come to him and we'll stay with him.*

It is inferred, 2. That Mission is distinguished likewise from a simple Procession, *v. gr.* a passive Generation; because a simple Procession says only an Habit to the Principle; but a Mission does not only say an Order or Habit to the Principle, but to a Term or some temporal Effect, which is not common to all the Persons, but is specifically attributed to the Person sent; for if it was common, it would not signify as a certain Separation of the Person sent from the Person that sends; which Separation, as it cannot be with regard to the Substance and Place, must be with regard to some temporal Effect which is proper to the Person sent, otherwise the Person that sends would be rather said to come along with her, than to send her. All which is confirmed by this Passage of the Scripture, *John xvi. I came forth from the Father, and am come into the World.* I came forth from the Father, shews the Procession; and am come into the World, denotes a temporal Effect, according to *St. Augustin, lib. 4. de Trinit. c. 20.*

It is inferred, 3. That the Mission is something notional, because what is proper to one Person is called notional in God: But the Mission is proper to one Person; for it is either taken actively, and thus is proper to the Person that sends; or passively, and thus is proper to the Person produced and sent. Notwithstanding that the temporal Effect to which the Person sent is sufficiently common to all the Persons; for it suffices that it be proper to the Person sent according to that special Manner whereby the Person sent exists in it. As it appears by the Example of Christ's Humanity; which as an Effect created by God, was of all the Persons: But as assumed was of the Word alone.

It is inferred, 4. That the Mission can be said in part eternal, and in part temporal, but it is to be said simply temporal. The first is apparent, because the Procession of the divine Persons is eternal; the second is proved by what we have said; the third, *viz.* that it must be said simply temporal, is inferred from the Scripture, which proposes it as temporal, *Gal. iv. But when the Fulness of the Time was come, God sent forth his Son.* *John xiv. The Holy Ghost whom the Father will send in my Name.* These Words, *has sent, he'll send*, signify something temporal.

It is inferred, 5. That that Mission does not happen by Command or Advice, because those two Manners import some Imperfection, from that, Command supposes a Subjection in the Person sent; and Advice Ignorance in the Person that sends: But there is no such Imperfection in the divine Persons, since the Person that proceeds has one and the same Essence with the Person from whom he proceeds: Therefore, &c.

I answer,

I answer, 2. That *there is a Mission in God*; because there is in God a Procession of some Person from another, with an Habit to the temporal Effect or Term in which he begins to be, or to be in another new Manner than he was before, as it appears from several Passages of the Scripture, *John viii.* Christ speaks thus of himself, *For I am not alone, but I, and the Father that sent me.* And *John 15.* *But when the Comforter is come whom I will send unto you from the Father.*

I answer, 3. That *it does not become every Person to be sent, but only to the Son and to the Holy Ghost.* Because it becomes those two Persons only to proceed from another. Whence St. *Augustin* says, *lib. 2. de Trinit. c. 5.* that we never read the Father was sent.

We'll ask next, *How many Missions there are in God, particularly passive ones, and in what Manner each of them happens?*

To which I answer, that *a divine Mission is divided in two Manners.* 1. *By reason of the Person, into active and passive.* By reason of the Effect into *visible and invisible.*

I prove the first Part, or first Division, which is *into active and passive*: Because the Mission is either of the Person that sends, and thus is active; or of the Person sent, and thus is passive.

I prove the second Part, or second Division of Mission, particularly passive into *visible and invisible*: Because either a Mission is that whereby a divine Person is sent to sanctify the Souls inwardly without any sensible Sign, and thus is said *invisible*: Or is that which is done in one of those two Manners, *viz.* or with some sensible Sign, or when the temporal Term thereof is something sensible. Let the Descent of the Holy Ghost, in Form of a Dove on Christ, and of fiery Tongues on the Apostles, be an Example of the former: And the Mission whereby Christ came into the World in the human Flesh be an Example of the latter.

But we must observe, *en passant*, that a divine Person is never sent visibly, without being sent invisibly likewise, by the Gifts of Grace, according to St. *Thomas*, *p. 1. q. 43. art. 7. ad. 6.* where he says, that it is not necessary that the invisible Mission should happen at the same Time of the visible one; but that it suffices that the visible Mission should signify or confer Grace, *de facto*, or that it has been conferred before: In that Manner the Holy Ghost sent to Christ in Form of a Dove conferred no Grace, because he had already a Plenitude thereof from the Instant of his Conception as due to him by reason of the hypostatical Union: But he indicated only that he had already that Plenitude of Grace.

I may be asked, 1. *How that invisible Mission happens?*

To which I answer, that it happens in two Manners, 1. Perfectly. 2. Imperfectly. It happens perfectly, when it happens by the justifying Grace, whereby, *v. gr.* the Holy Ghost dwells within us as in a Temple, according to this, *1 Cor. iii.* *Know ye not that ye are the Temple of God, and that the Spirit of God dwelleth in you.* And whereby we are made God's Friends, for Love is the Cause of the Union between Friends according to the Affection, and according to the Presence. And thus the Blessed are united to God by the Force of Grace, so that if through an Impossibility God was not every where, he would exist by the sanctifying Grace in the Soul of the Elect. The invisible Mission happens imperfectly, and dispositively only, when it happens by an existing Grace, whereby he wants to prepare a Temple for himself to dwell, unless we exclude him, according to this, *Revel. iii.* *Behold I stand at the Door, and knock, if any Man hear my Voice, and open the Door, I will come in to him.*

It is asked, 2. *How the visible Mission happens?*

I answer, that the visible Mission happens by something external and corporal, as when, *v. gr.* the Son was sent in the human Flesh; and the Holy Ghost in four Manners. 1. In the Form of a Dove, when Christ was baptized. The Dove was the Figure of the Fecundity which is in the Baptism. 2. In Form of a light Cloud, when Christ was transfigured on the Mount, to shew his Majesty and Divinity. 3. In Form of a Breath, when the Apostles received the Power of remitting Sins. 4. In Form of fiery Tongues, when the Apostles re-

ceived the Gift of speaking several Languages for the Conversion of the whole World.

From what we have said it is inferred, that a divine Person is primarily sent to confer Grace; whence when the Scripture speaks of the Mission of some divine Person, it commonly joins that Effect, *v. gr.* *John v.* *I am come that they may have Life.* *Rom. v.* *The Love of God is diffused in our Hearts by the Holy Ghost, which is given us.* And secondarily, that the Person is sent to all the other Effects, which a divine Person sent can operate in the Creatures.

It is asked, 3. *If the Son and the Holy Ghost can be said sent in those two Manners, viz. visible and invisible?*

Which I answer in the Affirmative; because, 1. Christ was not only sent visibly in the Incarnation; but invisibly likewise, by reason of the Gifts of the Understanding, according to St. *Augustin*, *lib. 4. de Trinit. c. 26.* and St. *Thomas*, *q. 28. art. 5. ad. 2.* where he insinuates this, and shews how it happens, informing us at the same Time that the Son is not sent according to the Perfection of the Understanding; but according to that Instruction whereby he breaks into an Effect of Love, since the Son in God is not every Word indifferently, but is a Word spiring Love. 2. The Holy Ghost is not only sent invisibly by Grace, but visibly likewise, in the aforesaid four Manners; as it appears from the Passage of the Scripture already quoted.

It is asked, 4. *If the invisible Mission happens to all those who are Partakers of Grace?*

Which I answer in the Affirmative, because such a Mission happens for the Sanctification of the Creature, according to St. *Augustin*, *lib. 3. de Trinit. c. 4.* but all those who are Partakers of Grace are sanctified; therefore an invisible Mission happens to them. For to those that Mission happens in whom the Holy Ghost dwells in some new Manner; but the Holy Ghost dwells in some new Manner, *viz.* by Grace, in those who are Partakers of Grace; therefore, &c.

Note. That having thus far treated of the divine Persons in general, I'll treat next of them in particular, beginning by the Person of the Father who is the first Person. Therefore, &c.

I'll ask, 1. *If, and in what Manner the Ratio of innascible and unbegotten, become the Father, or first Person; and if it be proper to him alone?*

Which to answer pertinently, we must observe, 1. That *unbegotten* can be considered in two Manners: 1. *Negatively.* 2. *Privatively.* Unbegotten negatively, is that which excludes entirely all Aptitude towards being produced: And unbegotten privatively, is that which if not of its proper and specifick Ratio, at least of its common, and as generical Condition, has an Aptitude towards being produced, or, which is the same, is apt to be produced, or in fact is not produced.

2. That *unbegotten*, privately taken, can be considered in two Manners; 1. For that which is not produced as an Effect from its Cause. 2. For that which is not produced by Generation. These pre-observed,

I answer, 1. That *the Name of unbegotten, in whatever Manner it may be considered, becomes the Father from his proper Condition.* Because he is not from another, and has no Aptitude, at least of his own proper Condition, towards being produced of another.

I have said, *of his own proper Condition*, to give to understand, that the Father by the common, and as a generical Ratio of Person, has some Aptitude towards being produced, since the divine Persons, considered in common, have no Repugnance towards being produced, as the Possibility of producing is not repugnant to him.

I answer, 2. That *the Name of unbegotten taken for that he has no Aptitude towards being produced, or taken for that which is not produced, like an Effect from a Cause, or for that which is not produced by Generation, is not proper to the Father alone: But is proper to him, when taken for that which is in no Manner produced.* Because it becomes likewise the divine Nature considered in itself, since it can be produced neither from its proper, nor from its common Ratio, though it can be communicated. And that's the Proof of the first Part of my Answer.

I prove the second Part, *viz.* that *the Name of unbegotten,*

gotten, taken privately for that which is not produced like an Effect from its Cause, is not proper to the Father, because that's also common to the Son and to the Holy Ghost; which though they be produced, do not proceed, notwithstanding, as an Effect from a Cause, otherwise they would be posterior in Nature to the Person that produces, and would be dependent of him, of a proper Dependency; as the Effect is posterior in Nature to its Cause, and depends of it of a proper Dependency: But it is an Absurdity to say that of the divine Persons, since between the Person producing, and the Person produced there is only a Priority of Origin, which imports no Dependency, properly said, of its Principle: Therefore, &c.

I prove the third Part, *viz. privately taken for that which is not produced by a Generation properly so called, does not become the Father alone*: Because it belongs likewise to the Holy Ghost. St. Jerome, in the Rules of Definitions among the Hereticks, and St. Gregory Nazianzene, *Serm. de Epiphan.* calls the Holy Ghost unbegotten.

I have said by *Generation, properly so called*, to give to understand that the Name of unbegotten, most commonly taken by the Church for that which is in no Manner from another, does not at all become the Holy Ghost. Whence, according to St. Augustin, *lib. 15. de Trinit. c. 16.* it is not allowed to say, without some Distinction, that the Holy Ghost is unbegotten.

I prove the fourth Part, *viz. that the Name of Unbegotten taken privatively, for that which is in no manner produced, becomes the Father alone*. Because the Fathers call him in that Sense unbegotten; and will not have the Holy Ghost called begotten or unbegotten; especially St. Athanasius in his Symbol, St. Hilary, *lib. 4. de Trinit.* and the second Council of Toledo, in the Confession of Faith. And because the Father, as such, is in no manner produced; neither by another Person, for then there would be four Persons, and even more, to be multiplied in infinitum; nor likewise by the Nature, since the Nature is not the Principle *quod* of the divine Production, as it appears from the Council of Lateran, under Innocentius III. *c. damnamus de summa Trinitate*. For there the divine Productions are attributed to the Persons alone, and not to the Nature.

I may be asked, *if the Ratio of Unbegotten and Inascibility puts something formally in God?*

Which I answer in the *Negative*; because it is not a constitutive Property, but only a notificative one; and put nothing formally in God, since it is only a Negation of Privation; which does not hinder it, notwithstanding, from having some Foundation in God, as some other Negations have: Which Foundation is the divine Paternity, for the divine Paternity requires not to be produced, because it constitutes the Father as the Principle of the first Production, and thus renders him inept towards being produced, and in that differs from a created Paternity, which does not require that the Father should not be produced.

It is asked, 2. *Why these two Names of Unbegotten and Inascible, taken in the aforesaid Signification, are attributed to the Father by the Church?*

I answer that it was occasioned by the Heresy of Sabellius; for Sabellius affirming that the Father was born of the Virgin Mary, the Orthodox, to condemn that Error, declared that the Father was Unbegotten and Inascible.

We'll ask next, *Whether the Name of Father becomes the first Person, and is proper to him alone?*

Which to answer pertinently, we must observe that the Name of Father, in God, can be consider'd in two Manners, 1. In order to the Creatures, from that he is the Creator, Conservator, Governor, Sanctifier, and Glorifier, of those which are intellectual. 2. In order to the inward Generation; from that, in God, one Person is generating, and the other begotten. These pre-observed,

I answer, that *the Name of Father, considered in Order, or with Respect to the Creatures, is not proper to the first Person alone, but only as considered with Respect to an inward Generation*.

I prove the first Part, *viz. That the Name of Father, considered with Respect to the Creatures, is not proper to the*

first Person alone; because it is common to the other Persons. For does not the whole Trinity create, preserve, govern, sanctify, glorify, &c. and are not all those Actions, which are *ad extra*, common to the whole Trinity? Does not God operate *ad extra*, as *one*, and not as Trinity? whence Christ speaks thus, *Matt. xxiii. For one is your Father, which is in Heaven*, and teaches us to pray thus, *Mat. xvi. Our Father which art in Heaven, &c.* Lastly, Does he not adopt us for his Children, and make us Heirs of the eternal Life?

I prove the second Part, *viz. That the Name of Father, with Respect to the inward Generation, is proper to the first Person alone*? Because that Name is proper and notional to that Person, to whom properly belongs an active Generation, properly so called, which tends of itself towards producing a living Term of the same Nature with itself; but such a Generation becomes the first Person alone, and does not become the other Persons, with Respect to the Creatures, but metaphorically, and by some Similitude: Therefore the Name of Father, taken with Regard to the inward Generation, is proper, and personal to the first Person alone, according to this Passage of the Scripture, *Matt. the last Chapter, Baptizing them in the Name of the Father, and of the Son, and of the Holy Ghost*.

I may be asked, 1. *Whether the Name of Father is said first, and principally of the first Person, with Respect to the Son, than of God with Respect to the Creatures.*

Which I answer in the *Affirmative*, because that Name being analogous, must be first and principally attributed to that Person, in whom is found the whole Signification of Generation, properly so called, and not only of a metaphorical one; but in the first Person is found the whole and proper Signification of Generation, properly so called, and not a metaphorical one only: Therefore the Name of Father must be sooner attributed to the first Person than to God: That the whole Signification of Generation, properly said, becomes most perfectly the Father; and becomes God but improperly and metaphorically, with Respect to the Creatures, is easily proved; because the first Person by the active Generation produces a Term perfectly like him in Nature; but God does not produce the Creatures of the same Nature with himself.

It is objected, the common Names in God, in our Manner of conceiving, are prior to the proper Names: But the Name of Father taken essentially, is common to the whole Trinity, and taken personally, is proper to the first Person; therefore the Name of Father must be said before of God, than of the first Person.

To which I answer, by a Distinction of the *major*, in the *Affirmative*, if the common Names be absolute, such as the Understanding, Will, Wisdom, Power, and Eternity, because those Names are included in the Persons, and not the Persons included in those Names: And in the *Negative*, if the common Names be respective towards the Creatures, such as these Names, Lord and Creator; because these Names become God freely, and those which thus become God freely, are posterior to those which become God naturally.

We'll ask next, *If Name and Ratio of Principle become the first Person of the Trinity; and that Name and Ratio be proper to him?*

Which to answer pertinently, we must observe, 1. That by the Name of Principle, taken in general, is understood by Aristotle, 4 *Metaphys. A first Thing whence something is, or happens, or is known*; therefore we commonly distinguish three Sorts of Principles, *viz.* of Composition, of Production, and of Knowledge.

2. That the divine Production can be considered in two Manners, *viz. ad intra*, and with respect to the immanent Actions, and *ad extra*, or with respect to the Creatures, as already observed.

3. That it is asked here, if the Principle both *ad intra* and *ad extra*, becomes the Father, and becomes him alone properly.—These pre-observed,

I answer, that *it becomes the Father to be a Principle, ad extra, but that is not proper to him; it becomes him likewise to be Principle, ad intra, neither is that proper to him; and it becomes him to be the Principle of the Son, and that is proper to him alone*.

I prove the first Part, *viz. that it becomes the Father*

to be a Principle, *ad extra*, but that it is not proper to him ; because all Sorts of Creatures must be produced by the whole Trinity, as already observed.

I prove the second Part, *viz.* that it becomes the Father to be the Holy Ghost, but that it is not proper to him ; because it becomes the Son likewise, to be with the Father one and the same Principle of the Holy Ghost ; as we shall see hereafter.

I prove the third Part, *viz.* that it becomes properly the Father alone to be the Principle of the Son ; because to him alone belongs properly the active Generation, as already observed.

From what we have said it is inferred, 1. That tho' it be common to the Father and to the Son to be the Principle of some eternal Production *ad intra*, it is notwithstanding, proper to him to be a Principle without a Principle, and is called by the holy Fathers the Principle of the whole Deity, particularly by St. *Atanasius* against *Sabellius* ; not that the Deity proceeds from him, for it would be an Heresy to believe it ; but because he is the Principle of the other Persons to whom he communicates the whole Deity. Whence St. *Denis*, lib. 1. de *divin. hierarch.* says, *that the Father is the Fountain, and Principle of the Divinity* ; and St. *Augustin*, lib. 4. de *Trinit. c.* 20. says, *that the Father is the Principle of the whole Divinity.*

It is inferred 2. That the Name of Principle is analogous, because the Relation of Principle to the Son and to the Holy Ghost is real ; but the Relation of Principle to the Creatures is of Reason ; and there is nothing univocal to a real Being, and to a Being of Reason : Therefore, &c.

It is inferred, 3. That the Person producing is the Principle *quod* of a divine Production ; the Power the nearest Principle *quo*, and the Essence the remote Principle *quo*.

It is inferred, 4. That the Father, to whom belongs entirely the Name and Ratio of Principle, cannot be said properly the Author and efficient Cause of the Son and of the Holy Ghost ; the Reason is, because either Name, according to its common Acceptation, imports a Diversity of Substance, and a Dependency of one from the other, and consequently a Priority and Posteriority of Nature, which we have already said, cannot be in the Divinity. Notwithstanding that the *Greeks* call the Father the Cause of the Son ; and St. *Augustin*, lib. 7. de *Trinit. c.* 1. calls him the Cause of his own Wisdom ; because the *Greeks* take the Name of Cause for that which is signified by the Name of Principle ; and because St. *Augustin* does not speak here of a Cause properly said, but of that which is conceived as a Cause, according to our Manner of conceiving. We conceive the Essence of God as an efficient Cause, from which, as from a remote Principle, and from the Understanding as from the nearest Principle, the divine Wisdom, *i. e.* the Son of God emanates. Notwithstanding also, that the Father is called by the ancient Fathers the Author of the Son ; because they take the Name of Author in that Sense that he is that Person, from whom another Person is ; as St. *Augustin* informs us, lib. 3. cont. *Maxim. c.* 14. *If*, says he, *he says that God the Father is the Author of the Son, because that he has begot, and this is begotten ; because this is of that, and not that of this, I agree with them : But if by the Name of Author you will make the Son less, and the Father greater, and not of the same Substance with the Son whose Father he is, I'll detest and reject him.*

From the first Person I'll pass to the second, asking first, *Which are the Names of the second Person of the blessed Trinity ; whether these three Names, viz. of Son, Word, and Image properly become him ?*

To which I answer, that the second Person is truly called, and truly is the Son of God the Father ? Which I prove by the Scripture, the Councils, the Fathers, and by Reason.

By the Scripture, *Matt.* the last Chapter, *Go ye teach all Nations, baptizing them in the Name of the Father, and of the Son, and of the Holy Ghost.* *John* iii. *God has thus loved the World, as to give him his only begotten Son.*

By the Councils, particularly that of *Nice*, where this is expressly mentioned.

By the Fathers, particularly St. *Augustin*, lib. 6. de

Trinit. c. 1. and lib. de *Heres. c.* 11. where he reckons the Alogians among the Hereticks, because they denied that the Word in the Divinity was properly the Son of God.

By Reason ; because he that proceeds from the Father by way of Generation, is to be called the Son of God the Father : But the second Person proceeds that Way from the Father, as already proved : Therefore the second Person of the Trinity must be called, and is truly the Son of God.

I answer, 2. That the second Person of the Trinity must be called, and is truly the Word of the Father. Which I prove by the Scripture, the Fathers, and by Reason.

By the Scripture, *John* i. *In the Beginning was the Word, and the Word was with God, and the Word was God.* And a little lower, *and the Word was made flesh.*

By the Fathers, particularly St. *Augustin*, in the Places above quoted.

By Reason ; because that must be called the Word, which is the Term of the divine Understanding, not only simply intelligent, but saying likewise, *i. e.* intelligent notionally ; but the second Person of the Trinity is the Term of the Understanding of God the Father, not simply intelligent only, but saying ; for the divine Father by Understanding himself, produces within himself the Word, which is his express Image ; not an accidental one as it is in us, but an Image consubstantial to him : Therefore the second Person of the Trinity must be called, and is the internal Word of the divine Father. Which to understand better, you must observe that there is a great Difference between understanding simply, and saying ; since understanding simply imports only an Habit of the Person that understands towards the Thing understood, and thus imports no Ratio of Origin. But to say truly, imports an Habit, not only to the Thing understood, but to the Word conceived, or the Term of the divine Intellection, and thus imports a Ratio of Origin : Whence it follows, that to understand simply becomes all the Persons ; and to say, becomes the first Person alone. It follows likewise, that all the Persons can be understood simple ; and the second Person alone can be said properly.

I answer, 3. That the second Person must be said, and is properly an Image. Which I prove by the Scriptures, the Fathers, and by Reason.

By the Scripture, particularly from the first Chapter of the Epistle to the *Hebrews*, where he is called, *the Splendor of Glory, and the Figure of his Substance.* *Coloss.* ii. *Who is the Image of the invisible God.*

By the Fathers, particularly St. *Augustin*, lib. 6. de *Trinit. c.* and St. *Thomas*, p. 1. q. 35. art. 2. where they say that Image in the Divinity is said personally of the Son, and becomes him alone, because said of him relatively.

By Reason ; because the Son is a co-essential Similitude of the Father, produced like him by the Understanding, and consequently formally by the Force of his Procession ; since it is of the Ratio of the Understanding to assimilate to itself the Thing understood. And in that the Son differs from the Holy Ghost, because tho' the Holy Ghost proceeds semblable and consubstantial to the Father and Son ; he does not, notwithstanding, proceed thus from both formally by the Force of his Procession, since it is not of the Ratio of the Will to assimilate to itself the Thing willed and loved, but only to be carried towards it, according to this of St. *Augustin*, *My Penchant is my Love, I am carried thither, wherever I am carried.* Notwithstanding that St. *Basil* and St. *John Damascenus*, call the Holy Ghost Image ; because they do not speak of an Image properly said.

It may be asked here, if the Son by reason of his Essence, has that of being the Image of the Father, or whether he has it by a Relation of Reason ?

To which I answer, that the Son has it by reason of both jointly, though in a different Manner. And the Reason is, because those two Things are required for an Image. 1. That it be produced from another and distinct from it. 2. That it be something semblable to the Thing in whose Similitude it is produced. The first becomes the Son, by reason of Relation ; and the other becomes him by reason of the Essence ; according to the Sentiment of St. *Augustin*, and of St. *Thomas*.

From

From what we have said it is easily inferred, that the Name of Image is a personal Name.

If it be objected, that that Name is a common Name to the three divine Persons, according to this Text of the Scripture, *Genes. 1. Let us make Man in our Image.*

I'll answer, that in this Place the Name of *Image* is improperly taken, *viz.* for an Exemplar, which differs from an Image in this particularly, that Image be some Similitude produced of the Imitation of another; and exemplar that in whose Imitation something is produced: Whence the divine Word is called Image with respect to the divine Father; from that it is produced at his Imitation; and it is called exemplar with respect to the Creatures, because the Creatures are produced at his Imitation; according to St. *Augustin, lib. de fide ad Petrum*, in these Words, *There is one Divinity and Image of the blessed Trinity, according to which Man was formed.*

We'll propose next, and solve some Difficulties relating to the Name of the Word above-mentioned; and ask, 1. *If the Name of Word be so personal, as to be proper to the Son as Son?*

I answer this Question in the Affirmative; because the Fathers infer it from the Scripture, particularly St. *Augustin, lib. 6. & 7. de Trin. c. 2.* and because, as already observed, it is not of the Word to understand himself, but to be something produced by Understanding, as the express Image of the Thing understood, *viz.* the Substance of the Father; but such Ratio of the Word becomes the Son; therefore the Name of Son in God is so personal, as to be proper to the Son.

Notwithstanding, 1. That Love is said essentially, or of the Love whereby God loves himself, and the Creatures; and personally of the Holy Ghost, because there is a different Ratio of the Love and Word: For Love signifies two Things, *viz.* the Act of loving, and the Term thereof, for want of Words, wherefore both are called by the Name of Love; but the Name of Word signifies only the Term of Intellection, but not the Act of Understanding; whence it is that Word in God, is said personally only; and love essentially and personally.

Notwithstanding, 2. That some Fathers, particularly St. *Anselm, in Monol. c. 6.* says that the Father, Son, and Holy Ghost understand and say, because he takes that Term for a simple Intellection, and not for a Diction strictly taken.

It is asked, 2. From the Knowledge of which Things the Word proceeds?

To which I answer, that he proceeds from the Knowledge of the divine Essence of the three Persons, and of the Creatures possible; and that formally. But that he does not thus proceed from the Knowledge of the Creatures existing in some Difference of Time.

I prove the first Part, *viz.* that *the divine Word proceeds from the Knowledge of the divine Essence, and of all the essential Perfections*; because if the divine Word proceeds from the Knowledge of some Object, as he must proceed in the Ratio of Words: It follows that he proceeds particularly from the Knowledge of the Essence, which, with its absolute and common Perfections, is the primary Object of the divine Intellection.

I prove the second Part, *viz.* that *the divine Word proceeds from the Knowledge of the three Persons*; because he proceeds from the comprehensive Knowledge of the Essence, and his being a Word infinitely perfect he requires to proceed from such Knowledge; therefore he must proceed from the Knowledge of the three Persons, which are identified with the divine Essence; otherwise that Knowledge from which he should proceed would not be comprehensive, and since to the Comprehension of the Essence is required not only the Knowledge of the Essence, but likewise the Knowledge of the Things contained formally in the Essence, and connected with it. Add that the divine Essence cannot be known comprehensively, without its being known requiring to exist actually in the three Persons; since it is the proper Ratio of the divine Substance, to require three Subsistences in which it exists actually: But that cannot be perfectly known without knowing the three Persons: Therefore, &c.

It may be objected against this second Part of my Answer, that the Word proceeds from the Knowledge of that Object whereof he is the Image; but he is not

the Image of all the Persons, since he is not his own Image, nor that of the Holy Ghost: Therefore he does not proceed from the Knowledge of the three Persons.

I answer, 1. By a Distinction of the Major; in the Affirmative, if it be understood either a Representative or natural Image; and in the Negative, if it be understood a natural Image only.

I answer, 2. By distinguishing likewise the Minor, and say that it is true that the Word is not the natural Image of the three Persons; but he is the representative one: Therefore I deny the Consequence, because for the Son to proceed from the Knowledge of the three Persons, it suffices that he be the representative Image of them. Which to understand better, you must observe, that it suffices for a representative Image to proceed objectively, as a Word, in us, is said the Image of the Thing known. But for a natural Image it is required that it should proceed actively and productively, according to St. *Anselm in Monol. c. 6.* where he teaches that the Word is the natural Image of the Father, but not his own natural Image or that of the Holy Ghost, from that the Son is not born, and does not proceed actively from himself and from the Holy Ghost, but from the Father. Which is illustrated by the Example of a Child which his Parents think semblable, or like a Stranger; that Child is only called the representative Image of that Stranger, and the natural Image of his Parents.

If I be asked, *Whether the Knowledge of the Person from which the Word proceeds be intuitive, and of Vision?* I'll answer in the Affirmative; because the Word proceeds from an intuitive Knowledge of the Essence: Therefore from the intuitive Knowledge of the three Persons, because he that knows intuitively the Essence, knows it as it is in itself: And that Essence is in fact in the three Persons, and God himself is the three Persons: Therefore, &c.

To confirm this Answer, I say, that the Word proceeds from the intuitive Knowledge of the Father; therefore from the intuitive Knowledge of the Son, and of the Holy Ghost; because one Relative is known in the same Manner as the other Relative is known, as it appears from Things created; for, *v. gr.* if you know confusedly the Father, you know confusedly the Son: If you know distinctly the Father, you know distinctly the Son.

I prove the third Part, *viz.* that *the Word proceeds from the Knowledge of the Creatures possible*; because he proceeds from the comprehensive Knowledge of the Essence, and of all the Attributes, and consequently of the Omnipotency, and in course of all Things possible; for the Omnipotency cannot be conceived, without conceiving likewise the Things possible. Whence it is not surprising if the Word be expressive of all the Creatures possible, according to St. *Augustin, lib. 11. Confess. c. 7. The Word, says he, is said without End.*

It is objected against this third Part of my Answer, that the divine Essence is known by the divine Father before the possible Creatures; but in that first Knowledge the Word proceeds: Therefore it follows that the Word does not proceed from the Knowledge of the possible Creatures.

To which I answer by denying the Major; because though the Essence be the primary Object, and the possible Creatures the secondary one; it does not follow hence, notwithstanding, that the Essence is seen before the possible Things, since the divine Essence be like a Looking-Glass, in which the Things possible are seen; but a Mirror is not seen before the Image, though the Mirror be as the Cause of the Image: Therefore some answer to the minor that the Word proceeds inadequately in that prior State. But others more rightly deny the Minor, from that the divine Word proceeds infinitely perfect, and consequently from the Knowledge of all the Things possible, which relate to the comprehensive Knowledge of the divine Essence and Omnipotency.

It is objected, 2. That if the divine Word proceeds from the Knowledge of the Things possible, it follows that the Things possible are prior to the Word; which cannot be said, since the Word is from all Eternity. According to *John i. In the Beginning was the Word, &c.* Therefore, &c.

I answer by a Distinction of *the Sequel of the Major*: In the Affirmative, if meant according to our imperfect Knowledge, whereby we commonly conceive the divine Things, as we do the created Things to which we are used, and in which the Object is prior to the Knowledge, whereof it is the Knowledge: And in the Negative, if meant according to itself: The Reason is because the known Things are not before they are known by the Understanding of the Father.

I prove the fourth Part of my Answer, *viz.* that *the divine Word does not proceed formally from the Knowledge of the Creatures existing in some Difference of Time*. Because he does not proceed from the Knowledge which pre-supposes the Word already produced; but the Knowledge of the Creatures existing in some Difference of Time pre-supposes the Word already produced, since it pre-supposes a free Decree of producing the Creatures, which is from the whole Trinity, since the Creation is from the whole Trinity: Therefore, &c.

It is objected against this fourth Part of my Answer, that the Knowledge from which the Word proceeds is comprehensive: But that it cannot be such, unless it reaches the Creatures existing in some Difference of Time, since they are the Effects towards which the Essence and Omnipotency are ordained; therefore the Word proceeds from the Knowledge of the Creatures existing in some Difference of Time.

To which I answer by a *Distinction of the Major*; in the Affirmative, if it be understood that it is comprehensive of a necessary Comprehension; and in the Negative, if it be understood that it is both necessary and contingent: I distinguish likewise the Minor; it cannot be comprehensive, unless, &c. of a Comprehension both necessary and contingent, that's true; of a Comprehension simply necessary, I deny it. Which to understand better, you must observe, 1. That that Comprehension is said necessary, whereby are known the Things necessary, and which have a necessary Connection with them; and that it is said both contingent and necessary, whereby are known comprehensively the Things which are necessary, and have only a contingent Connection, with the divine Essence and Omnipotency, and depending on the Will.

From these you'll observe, 2. And infer that the Word as it is really, is the Term of a necessary Comprehension: And that he is not the Term of a contingent Comprehension, but only according to some Respect of Reason posterior to the Production of the Word.

You'll observe, 3. That the Things contingent are only contingently connected with the divine Essence and Omnipotency: Because though those contingent Things require necessarily the divine Essence and Omnipotency; they are not, notwithstanding, necessarily required by the divine Essence and Omnipotency.

We'll consider next, *some Things which are Articles of Faith, with regard to the second Person of the Trinity*.

From what we have said it is inferred, 1. That the second Person of the Trinity is the true and natural Son of the Father begotten by him, according to this *Psalms* ii. *Thou art my Son, this Day have I begotten thee*. And *Matt.* iii. *This is my beloved Son*. Which Words St. Leo explains thus, in his Homily on the Transfiguration. *This is my beloved Son* (says he) *not an Adoptive, but a proper one; not created, but begotten*. For if he was not a natural Son, but only an adoptive one, he could not be called begotten. That he is the only Son appears from *John* iii. *God has thus loved the World, as to give it his only Son*.

It is inferred, 2. That the second Person of the Trinity is consubstantial to the Father, *i. e.* of the same Substance and Nature, according to this Passage of *John* i. *I and the Father are one*. St. Augustin says, *Tract.* 56. in *Joan.* that by that Passage we are delivered from the Errors of *Arius* and *Sabellius*, and from *Scylla* and *Charybdis*; because what says *one*, signifies an Unity of Essence and Nature, and consequently the Consubstantiality, which *Arius* denied. And what says *we are*, denotes a Distinction of Persons, which *Sabellius* denied. Likewise St. *Athanasius*, *Serm.* 4. *cont. Arian.* and St. *Hilary*, *lib.* 7. *de Trinit.* Whence it is not surprizing if that Truth was defined in the first Council of Nice against the *Arians*, by using the Word (*consubstantial*)

in the Symbol which was received afterwards with an unanimous Consent in all the other Councils.

It is inferred, 3. That the only Son of God is co-eternal to the Father, as it appears from the Scripture, *Mic.* v. *Whose Goings forth have been from all Eternity*. And *John* i. *In the Beginning was the Word, &c.* The former Passage St. *Jerom* interprets, of the Generation of the Son; and the latter St. *Augustin* with the other Fathers make use of, to prove the Eternity of the Word.

It is inferred, 4. That the Son is equal in all Things to the Father, according to this Testimony of the Scripture, *Philip* ii. *Who being in the Form of God, thought it no Robbery to be equal with God*, *i. e.* as St. *Chrysostom* and St. *Ambrose* explains, as he was of the same Nature and Substance with God the Father, he arrogated to himself nothing undue to him, when he believed himself equal to God in all Things; whence St. *Augustin* in *Psalms* cxxvi. *Why*, says he, *is it not a Robbery? Because it is Nature*: And *lib.* 3. *cont. Maxim.* the *Arian* answering to the Objection of the *Arians*, who said that the Son was lesser than the Father, because he had received all he had from him, *He that received*, says he, *cannot be unequal to him who gave, because he has received it to be equal; but he that says that all that the Father has are his, cannot have less*.

It is inferred, 5. That the Son is a true God, and one with the Father, as it may be inferred from the Passages of the Scripture already quoted; and from the Answer of the Apostle St. *Thomas*, *My Lord, and my God*. And from these Words, *Rom.* ix. *Of which is Christ according to the Flesh, who is above all Things God blessed for ever*. And 1 *John* v. *And we be in his true Son, who is true God*.

We'll treat next of the Person of the Holy Ghost, and ask, first, *If of several Names, these three particular ones, of Holy Ghost, Love, and Gift, become the third Person of the Trinity, and become him alone?*

To which I answer 1. *That the Name of Holy Ghost, taken and composed of two Words is common to the three Persons, and taken for a single Name composed of two, by the Appropriation of the Church, and of the holy Fathers, it is personal, and becomes the third Person alone*.

I prove the first Part of my Answer, *viz.* *That the Name of holy Spirit, taken as composed of two Words is common to the three Persons*; because the Scripture attributes the Name of Spirit to God, and consequently to all the three Persons. It is attributed to the Father, *John* iv. *God is Spirit, and the Father searches those who adore him in Spirit and Truth*. To the Son, *Thren.* 4. *The Spirit of our Face, Christ*. To the Holy Ghost likewise, *John* iv. *The holy Spirit whom the Father will send in my Name*. And because the Name of holy is attributed likewise to all the Persons in that Trisagion of *Isaias* vi. *Holy, Holy, Holy, the Lord, &c.* And because that has the Ratio of Spirit, which is free from Matter, and has the Name and Ratio of Holiness which is pure and free from all Spot; but the three Persons are thus: Therefore the said Name taken complexively is common to the three Persons.

I prove the second Part, *viz.* that *the Name of the Holy Ghost taken for a single Word becomes the third Person alone*; and that by the Scripture, the Fathers, and by Reason.

By the Scripture, which commonly uses that Expression, for by it, it designs the third Person distinct from the Father and Son, *Matt.* the last Chapter, in these Words, *Go ye, teach all Nations, baptizing them in the Name of the Father, and of the Son, and of the Holy Ghost*. And 1 *John* v. *There are three that bear Witness in Heaven, the Father, the Son, and the Holy Ghost, and those three are one*.

By the Fathers, particularly St. *Ambrose*, *lib.* in Symbol. *Apost.* c. 1. *Though*, says he, *the Father be Spirit, the Son be Spirit; and the Father be holy, and the Son be holy; the third Person, notwithstanding, is properly called the Holy Ghost*. And St. *Augustin*, *lib.* 15. *de Trinit.* c. 19. where he says very near the same Thing. Likewise, *lib.* 11. *Confess.* c. 10. where we read these Words, *The Spirit of the Father, and of the Son, is called in the sacred Writs the holy Spirit, by a certain proper Notion of that Name*.

By Reason, because on account of the Searcity of Words,

Words, the third Person in the Scriptures and Councils, is designed by that Name as distinct from the others; and because, according to the Reason of Congruency alledged by St. Thomas, he is thus called, because he proceeds from the Father and the Son, by Way of the Will, and the Terms of Spirit and Holiness belong properly to the Will. For a Man is called Holy from the Operation of his Will, and not from that of his Understanding; and to breathe sometimes signifies to love with Passion, or to desire with Violence; as when we commonly say to breathe Revenge and Death, or when we say, on the contrary, that holy Men breathe Charity, Piety, &c.

I answer 2. *That the Name of Love is sometimes taken essentially, and thus is common to all the Persons; and sometimes notionally and actively, and thus becomes the Father, and the Son alone; and sometimes personally and passively, and thus is proper to the third Person alone.*

I prove the first Part, viz. *That the Name of Love is sometimes taken essentially, and thus is common to all the Persons*; because the Name of Love is sometimes taken for the Act of the Will, whereby the Will loves formally, and wills good; but that Act is common to all the Persons that are in God, as one and the same essential Will is common to all; since there is none of them who does not love the Saints, and will them good; Therefore, &c.

I prove the second Part, viz. *That Love sometimes is taken notionally and actively, and thus is only common to the Father and to the Son*; because Love is taken, in God, for an active Spiration, which becomes the Father and Son alone.

I prove the third Part, viz. *That the Name of Love is sometimes taken personally and passively, and thus becomes the third Person alone*: Because the Name of Love is taken for the Term itself of the Love wherewith the Father and Son love mutually one another: And thus taken, the Name of Love is taken personally, and becomes the third Person alone: Therefore, &c.

It is objected against this third Part, that by the Term of Love is to be understood the Act of loving; but the Act of loving is not something proper to the third Person, but is something common to the three Persons; therefore the Name of Love is not a personal Name, becoming the third divine Person alone.

I answer to the major, that the Name of Love does not become the Act of loving only, but the Term of Love; and that by Reason of the Scarcity of Terms.

From what we have said, it is inferred that the Name of Love, taken essentially, becomes the whole Trinity, but is, notwithstanding, oftener attributed to the Holy Ghost; because he proceeds by manner of Love, because the Charity shines in Men's Sanctification, which is attributed to the Holy Ghost. It is inferred likewise that the Name of Love, taken for the Term of that Love, whereby the Father and Son, in God, love themselves mutually, is the proper Name of the third Person, and is attributed to him only. Hence St. Augustin expresses himself excellently well on that Subject, lib. 15. de Trinit. c. 14. *What can be more convenient, says he, that he who is properly called Charity, who is a Spirit common to both.*

It may be asked here, *In what Sense must be understood what is said that the Father and Son love one another by the Holy Ghost?*

To which I answer, that that can be said truly and properly, if the Term be taken notionally, but not if taken essentially; because the Father and Son love one another relatively and notionally by the Holy Ghost, as by the Term of their mutual Dilection; for what is to love notionally, but by loving to produce the Terms of one's Love, or Love itself: As to understand notionally, is, by understanding, to produce the Term of Intellection? Therefore as the Father and Son cannot love mutually one another notionally, unless by producing Love which is the Holy Ghost; thus they cannot love themselves mutually but by the Holy Ghost, as by the Term produced. Hence Synesius, Hym. 4. calls the Holy Ghost, *The Center of the Begetter, and of the Begotten.* And St. Bernard, Serm. 8. in Cant. on these Words, *let him kiss me with a Kiss of his Mouth*, speaks thus, *if we*

take rightly the Father kissing, and the Son kissed, it will not be void from the Thing, to understand the Holy Ghost to be the Kiss; his being the unperturbable Peace of the Father, and of the Son, their individual Love, and indivisible Unity.

It may be asked here, *From the Love of whose Things the Holy Ghost proceeds?*

To which I answer, that he proceeds from the Love of the Essence, embracing all the essential Perfections of the three Persons, and of the Creatures possible; but not from the Love of the Creatures existing in a Difference of Time, at least formally. Because he proceeds from a Love necessarily very perfect, and not from a free and contingent Love, such as is the Love of the Creatures existing in some Difference of Time, which Love is likewise posterior to the Production of the Word; since the Creatures are not discerned, nor consequently loved of a free Love, unless it be by Persons existing, because the Decree is common to all the Persons.

I answer, 3. *That, in God, the Name of Gift is sometimes taken essentially, and thus is common to the three Persons; and sometimes notionally; and thus becomes the Son and Holy Ghost alone; and sometimes personally; and thus becomes the Holy Ghost alone, and is proper to him.*

I prove the first Part, viz. *That the Name of Gift is taken sometimes essentially, and thus is common to all the Persons*; because by the Name of Gift, essentially taken, is understood a proper Good conferred on another, or to be conferred, or apt to be given: But such a Good, in God, is common to all the Persons, since all the Persons have Goods proper to themselves, apt from all Eternity, to be given, and given gratuitely in Time.

If it be objected, that the Ratio of Gift becomes in no Manner the Father; because there must be a Distinction between him that gives, and the Thing given: I'll deny the whole Objection, because a Person can give his own proper and personal Good to another, by giving himself liberally; for it is not necessary to the Ratio of Gift, that it should be given by another, thus the divine Father can have the Ratio of Gift.

I prove the second Part, viz. *That the Name of Gift is sometimes taken notionally, and thus becomes only the Son and the Holy Ghost*; because by the Name of Gift notionally taken, is understood that Thing which is proper to Somebody by Origin, is given to another liberally, or apt to be conferred and given: But there is such a Gift in God, and becomes the Son and the Holy Ghost only: For it becomes those two Persons to proceed from one another, and to be his proper Good by Origin, v. gr. It becomes the Son to be the proper Thing of the Father, by Reason of his Procession from him, and he is given liberally to us by him, according to this of John iii. *God has thus loved the World as to give him his only Son.* It becomes, likewise, the Holy Ghost to be the proper Thing of the Father, and of the Son, by Reason of his Procession from both, and he is given liberally to us from both. As it appears from John xv. *But when the Comforter is come whom I'll send unto you from the Father, even the Spirit of Truth.* Galat. iv. *He sent the Spirit of the Son.* John xx. *Receive the Holy Ghost.*

I prove the third Part, viz. *That the Name of Gift is sometimes taken personally, and thus becomes the third Person alone, and is proper to him alone*, because the Name of Gift, personally taken, is understood, in God, that Suppositum, which, by Virtue of his Procession, proceeds as a Gift: But there is some Suppositum in God which proceeds by manner of Gift, and it becomes the third Person alone to be such a Gift, because it becomes him alone to proceed in Virtue of his Procession, by manner of Love, and consequently by manner of first Gift, since Love is a first Gift, because the first Thing we give to him, to whom we will Good, is Love, which is the first of all liberal and gratuite Donation; for the Rest are given by Love. Whence it is not surprising if the Holy Ghost is so often called a Gift in the Scripture, Acts ii. *you'll receive the Gift of the Holy Ghost.* And c. viii. *You believed that the Gift of God could be purchased with Money.*

From what we have said, it is inferred, 1. That the Ratio of Gift does not become equally the Son, and the Holy Ghost; because though the Son proceeds donable, he

he does not, notwithstanding, as donable by Virtue of his Proceſſion, ſince he does not proceed as Love, as the Holy Ghoſt proceeds.

It is inferred, 2. That the Name of Gift, at leaſt as becoming the Holy Ghoſt, includes two Relations, one to the Giver, and the other to him who receives. The former is real, indiſtinct, notwithstanding, from that which the Holy Ghoſt has to the Father and to the Son on account of his Origin; according to this of St. *Auguſtin*, lib. 4. de *Trin.* c. 20. but the latter, whereby it is referred to us to whom it is given, is of Reason.

It is inferred, 3. That the ſaid former Relation becomes the Holy Ghoſt from all Eternity, and the latter in Time; becauſe the Holy Ghoſt proceeds from all Eternity from the Father and the Son, and is given to us in Time.

We'll aſk next, *If the Holy Ghoſt proceeds from the Father, and the Son, as from one Principle, and as a true God, conſubſtantial and equal to both in all Things?*

To which I answer, 1. That *the Holy Ghoſt proceeds from both the Father and the Son*; which I prove by the Scripture, the Councils, the Fathers, and by Reason.

By the Scripture, particularly from thoſe Places in which the Holy Ghoſt is ſaid to be ſent and given; ſince notional Miſſion and Gift in God imports a Proceſſion, as ſhewn in the Paſſages already quoted, *John xv. When the Comforter is come whom I will ſend unto you from the Father.* And *John xvi. He ſhall glorify me, ſays Chriſt, for he ſhall receive of mine.* St. *Ambroſe*, lib. 1. de *Spirit. Sanct.* and St. *Auguſtin*, *Tract.* 99. in *Joan.* c. 12. have underſtood this Paſſage of the Holy Ghoſt.

Notwithstanding what is ſaid in the Scripture, *I'll ſend, and he'll receive*, in the future Tenſe, and not I have ſent, and he was received, in the Preterit; becauſe as St. *Auguſtin* obſerves in the Place above quoted, the Word being eternal in whatever Tenſe he be put, whether preterit, preſent, or future, he is not put falſely. Add, that the Miſſion of the Holy Ghoſt is eternal and temporal under divers Reſpects; eternal, if he that ſends, and he that is ſent be conſidered; and temporal, if we conſider thoſe to whom he is ſent; whence it is not ſurprizing if his Miſſion to the Apoſtles be expreſſed in the future Tenſe, ſince ſuch a Miſſion was to happen.

By the Councils, particularly that of *Ephesus*, in which was read and received the Epiſtle of St. *Cyri*l to *Nestorius*, in which was very well proved the Proceſſion of the Holy Ghoſt from the Father, and from the Son. Likewise by that of *Chalcedon*, *Act.* 5. in which the ſame Epiſtle was received and confirmed. Laſtly, by the Council of *Florence*, in which the ſame Truth was ſimply and abſolutely received by both the *Greeks* and *Latins*. Though the *Greeks* afterwards unfortunately renounced that Faith.

By the Fathers, particularly St. *Baſil*, lib. 3. cont. *Eunom.* St. *Chryſoſtom*, *Homil.* 4. de *Symbol.* and a great Number of other Fathers, whoſe Doctrin is declared at large in the ſaid Council of *Florence*.

By Reason; becauſe though that Truth is not expreſſly marked in the Scripture; it can be inferred from thence notwithstanding, that the Holy Ghoſt proceeds from the Father and the Son, particularly from theſe Words, *All that the Father has are mine*, except the Paternity, ſays St. *Auguſtin*; but the Father has the ſpirative Power, therefore and the Son; and thus it muſt be ſaid that the Holy Ghoſt proceeds from the Father and the Son. Becauſe if the Holy Ghoſt was not to proceed from the Son, he would not be diſtinguiſhed from him, ſince between both Perſons there would be no relative Oppoſition, which in God is the Foundation of a real Diſtinction.

I answer, 2. That *the Holy Ghoſt proceeds from the Father and the Son, as from a ſole Principle*; which I prove by the Scripture, the Councils, the Fathers, and by Reason.

By the Scripture, particularly by thoſe Places already quoted; from which it appears that he has been ſent, and given by the Father and the Son.

By the Councils, particularly the general one of *Lions*, c. unic. de *ſumma Trinit.* & ſide *Catholic.* And likewise by that of *Florence*, in the Letters of Union where this is expreſſly defined.

By the Fathers, particularly St. *Auguſtin*, lib. 5. de *Trinit.* c. 14. where he ſpeaks thus, *As the Father and Son, and the Holy Ghoſt, are one Creator and one Lord; likewise the Father and the Son, are the ſole Principle of the Holy Ghoſt, and not two Principles.*

By Reason; becauſe the ſpirative Faculty whereby the Holy Ghoſt is produced, is one and the ſame numerically in the Father and Son: Notwithstanding that the Father and Son are two diſtinct Perſons, having between them the Faculty of Breathing; becauſe it cannot be concluded hence, that they are two breathing, becauſe when there are divers Suppoſitums, and the Forms are not diverſe, the adjective Name can be put in the plural, but not the ſubſtantive; which require that not only the Suppoſitums, but the Form likewise, which they ſignify, ſhould be multiplied: Whence as there are two Suppoſits breathing in God, viz. the Father and the Son, and there be but one Form whereby they breathe, whence the ſpirative Power; hence it is that they are rightly called two breathing and one Spirator, and not two Spirators.

From what we have ſaid it is inferred, that the Father and Son are not only the ſole, but alſo the immediate Principle of the Holy Ghoſt, as having one and the ſame Faculty of breathing. Notwithstanding what St. *Thomas* ſays after St. *Hilary*, that the Holy Ghoſt proceeds from the Father through the Son, becauſe it is only ſaid in that Senſe, that the Father is the firſt Perſon, who produces his Son before the Holy Ghoſt, by a Priority of Origin: And thus nothing hinders the third Perſon from proceeding properly and immediately from both.

I answer, 3. That *the Holy Ghoſt proceeds from the Father and Son a true God, conſubſtantial, and equal in all Things to the Father and Son.*

This Proposition wants no farther Proof, ſince it has been ſufficiently proved already, by what we have ſaid on this Subject.

We'll aſk next, *If the Holy Ghoſt is diſtinguiſhed really from the Father and Son, and whether he would be really diſtinguiſhed from the Son, if through Impoſſibility he was not to proceed from him?*

To which I answer, 1. That the Holy Ghoſt is really diſtinguiſhed from the Father and Son; becauſe he proceeds from both, and thus has with both a relative Oppoſition, which in God is the Foundation of a real Diſtinction, according to St. *Anſelm*, lib. de *Proceſſ. Spirit. Sanct.* c. 2. where he ſays, *that all Things are one, where there is not a relative Oppoſition.*

I answer, 2. That if the Holy Ghoſt was not to proceed from the Son, he would not be diſtinguiſhed from him; becauſe, as already obſerved, according to St. *Anſelmus's* Doctrin, the Perſons in God are not diſtinguiſhed, nor can be diſtinguiſhed really, but where there is a relative Oppoſition; but if the Holy Ghoſt was not to proceed from the Son, there would be no relative Oppoſition between both, becauſe a relative Oppoſition happens only between the Perſon producing and the Perſon produced: Therefore, &c.

This Sentiment is confirmed from that unlike Relations, ſuch as are, v. gr. the active Generation, and the active Spiration in God, are not diſtinguiſhed really between them, becauſe one is not from the other, as Intellection and Volition are not diſtinguiſhed really between them, becauſe neither proceeds from the other, and thus are not relatively oppoſed to one another; becauſe a relative Oppoſition is only between two, one of whom proceeds from the other, either immediately or mediately. Immediately, as between Paternity and Filiation; likewise by the active Spiration which is in the Father and Son, and the paſſive Spiration; and mediately between the Filiation and paſſive Spiration; which has no otherwiſe a relative Oppoſition with the Filiation, but by means of the active Spiration. Likewise between the Paternity and the paſſive Spiration, which has no otherwiſe a relative Oppoſition with the divine Paternity, but by means of the active Spiration.

It is objected, 1. That if the Holy Ghoſt ſhould proceed from the Son alone, and not from the Father, he would be ſtill diſtinguiſhed from the Father; therefore if he ſhould proceed from the Father alone, and not from the

the Son, he would be likewise still distinguished from the Son.

I answer by denying the Consequence; the Reason of the Disparity is, that if even the Holy Ghost should proceed immediately from the Son alone, he should notwithstanding proceed immediately from the Father, because he should proceed from the Son by the Faculty of Breathing communicated necessarily, and not by Accident, to the Son, which would be sufficient to establish a real Distinction between the Father and the Holy Ghost. But if it was supposed that the Holy Ghost proceeds immediately from the Father alone, he could not be said that he proceeds in any Manner from the Son, because the Father has not the Faculty of Breathing communicated to him by the Son, and thus would have no relative Opposition; and therefore there would be no Reason why he should be really distinguished from him.

It is objected, 2. That when the same Constitution of a Thing remains, there remains likewise the Distinctive of the same Thing from another Thing; but suppose that the Holy Ghost should not proceed from the Son, there would remain in the Holy Ghost the same Constitutive, viz. the passive Spiration: Therefore the same Distinctive would remain in him, and thus would be distinguished from the Son, as he is now.

I answer, by denying the Minor; because there would not be in the Holy Ghost the same passive Spiration; because he would not require to be, then, from the Son, as it requires it now; and vicissim, the Filiation, in that Hypothesis, would not require to be the Principle of the Holy Ghost, as he requires it now. Whence it follows, that he would not be the same Constitutive, at least in Species, or quasi Species; and in that Hypothesis, to the utmost, the passive Spiration which would be then, should agree generically with the passive Spiration that now is; and thus it appears that there would not remain the same Constitutive, nor consequently the same Distinctive; and therefore the Holy Ghost would not be distinguished from the Son.

Many of the Heathens seem to have had a Notion of a Trinity. — *Stack. Eugub. de Peren. Philosoph. lib. 1. c. 3.* observes, that there is nothing in all Theology more deeply grounded, or more generally allowed by them, than the Mystery of the Trinity. The Chaldeans, Hebrews, Phœnicians, Greeks, and Romans, both in their Writings, and their Oracles, acknowledged that the supreme Being had begot another Being from all Eternity, which they sometimes called the Son of God, sometimes the Word, sometimes the Mind, and sometimes the Wisdom of God, and asserted it to be the Creator of all Things.

Among the Sayings of the Magi, the Descendants of Zoroaster, this is one; Πάυλα ἐξέτελεσε πάτερ καὶ νῦν

παρδωνε δεύλεω: The Father finished all Things, and delivered them to the Second Mind. — The Egyptians called their Trinity *Hemphtha*, and represented it by a Globe, a Serpent, and a Wing disposed into an hieroglyphical Symbol. — *Kircher, Gale, &c.* denote the Egyptians learned their Doctrine of the Trinity from Joseph, and the Hebrews.

The Philosophers, says St. Cyril, owned three Hypostases, or Persons: They have extended their Divinity to three Persons, and even sometimes used the Term *Trias*, Trinity: They wanted nothing but to admit the Consubstantiality of the three Hypostases, to signify the Unity of the Divine Nature, in Exclusion of all Triplcity with regard to the Difference of Nature; and not to hold it necessary to conceive any Inferiority of Hypostasis.

In Effect, Plato, and some of his Followers, speaks of a Trinity in such Terms, that the Primitive Fathers have been accused of borrowing the very Doctrine from the Platonick School; but Father *Morgues*, who has examined the Point, asserts, that nothing can be more stupid, than to suppose the Platonick Trinity brought into the Church, and to have Recourse to the Platonism of the Fathers to discredit their Authority with regard to the Dogma.

But let the Trinity of the Heathens be how it will, it is certain they had some Notion, though very imperfect; of that august Mystery, which though one of the most incomprehensible of the Christian Religion, and is equally the Object of our Faith, with the Existence of a supreme Being, both being equally true, and equally warranted by the Scripture, and the Authority of the universal Church: Therefore I cannot conceive how those who profess themselves Christians, can have the sacrilegious Presumption to deny the Trinity, under Pretence that they cannot conceive that Mystery; but could it be a Mystery if it was comprehensible? And is it not because it is above a natural Comprehension, that it is called a Mystery? there has never been a Religion without Mysteries; that of the Hebrews, which was then the true Religion, was full of them; which they had thought a sacrilegious Temerity in them to attempt to fathom; the Christians alone have endeavoured, and endeavour still every Day, to pry with a criminal Curiosity, into what God, in his supreme Wisdom, has thought fit to hide from them; and by that Means endeavour to destroy the Faith on which the Christian Religion is founded. We have still among us *Arians, Sabellians, Samosatians, &c.* who improve on the Errors of those first Enemies of the Blessed Trinity; notwithstanding the frequent Anathema's thunder'd against them by the universal Church.

TURNING.

TURNING, is the Art of fashioning hard Bodies, as Brasses, Ivory, Wood, &c. into a round or oval Form in a Lathe.

The Lathe is composed of two wooden Cheeks, or Sides, parallel to the Horizon, having a Groove or Opening between; perpendicular to these, are two other Pieces, called *Puppets*, made to slide between the Cheeks, and to be fixed down at any Point at Pleasure.

These have two Points, between which the Piece to be turned is sustained; the Piece is turned round, backwards and forwards, by Means of a String put round it, and fastened above to the End of a pliable Pole, and underneath to a Tredle or Board, moved with the Foot: There is also a Rest which bears up the Tool, and keeps it steady.

Note, That the Invention of the Lathe is very antient: *Diodorus Siculus* says, the first who used it was a Grandson of *Dadalus*, named *Talus*. *Pliny* ascribes it to *Theodore* of *Samos*, and mentions one *Thericles*, who rendered himself very famous by his Dexterity in managing the Lathe. — With this Instrument the

Ancients turned all Kinds of Vases, many whereof they enriched with Figures and Ornaments in Basso relievo: Thus *Virgil*,

Lenta quibus turno facili superaddita vitis.

the Greek and Latin Authors make frequent Mention of the Lathe; and *Cicero* calls the Workmen, who used it, *Vascularii*. It was a Proverb among the Ancients, to say one Thing was formed in the Lathe, to express its Delicacy and Justness. The same Proverb is retained to this Day among the French; and we even say of a Man, who is exceedingly well shaped, *il est fait au Tour*.

There is a Kind of wooden Pulley, making a Member of the Turner's Lathe, which is called *Mandrel*. Of these there are several Kinds; as

Flat Mandrels which have three or more little Pegs or Points, near the Verge, and are used for turning flat Boards on.

Pin Mandrels, which have a long wooden Shank to fit into a round Hole made in the Work to be done.

Hollow

Hollow Mandrels, which are hollow of themselves, and used for turning hollow Work.

Screw Mandrels, for turning Screws.

The other Instruments used in *Turning*, are Chissels of different Kinds.

Turning is performed, by putting the Substance to be turned upon two Points, as an Axis; and moving it about on that Axis, while an Edge-tool, set steady to the Outside of the Substance, in a Circumvolution thereof, cuts off all the Parts that lie farther off the Axis, and makes the Outside of that Substance, concentrick to the Axis.

The Workman stands, or is seated at his *Lathe*, with his right Foot on the Treddle to give the Motion, which must be very moderate and even; he places his Chissel on a Rest, fastened to the *Lathe*, some Distance from his Piece which is to be worked, and a little un-

derneath it he approaches gently his Chissel to the Piece, so that the Edge thereof may reach it; and goes on gradually to work, without leaving any Ridges, but when a Piece is to be cut off quite; and when he meets with a Knot, he must go on still more gently, otherwise he would run the Risk of splitting his Work, and notch his Tool.

The Invention of *Turning* appears to be very antient. Some, indeed, to do Honour to the Age, will have it brought to Perfection by the Moderns; but if what *Pliny*, and some other antient Authors relate, be true, that the Antients turned those precious Vases, enriched with Figures and Ornaments in Relievo, which we still see in the Cabinets of the curious; it must be owned that all that has been added in these Ages makes but a poor Amends for what we have lost of the Manner of *Turning* of the Antients.

UNIVERSITY.

UNIVERSITY, UNIVERSITAS, is a collective Term, applied to an Assemblage of several Colleges, established in a City or Town, wherein are Professors of several Sciences, appointed to teach them as Students; and where Degrees or Certificates of Study, in the divers Faculties, are taken up.

They are called *Universities*, or *universal Schools*, by Reason the four *Faculties*, which are *Theology*, *Medicine*, *Law*, and the *Arts* and *Sciences*, are supposed to make the World, or whole Compass of Study.

The four most famous *Universities* in *Europe*, are those of *Paris* in *France*, *Oxford* in *England*, *Bologna* in *Italy*, and *Salamanca* in *Spain*.

That of *Paris* is reckoned the first of the four, and considered as such by all *Europe*, as being the most antient, having been instituted by *Charlemagne*, in the Year of Christ 814.

Besides the Universities of *Paris*, there are in the Kingdom of *France* these others following, viz. *Toulouse*, *Bordeaux*, *Poitiers*, *Orleans*, famous for the civil Law, *Bourges*, *Angiers*, *Caën*, *Montpelier*, famous for the Faculty of Medicine, *Cahors*, *Nantz*, *Reims*, *Valence*, *Aix*, *Douay*, *Dole*, &c.

But to inform the Reader of the Exercises practised in those Universities, it suffices to give a concise Description of those of the *University* of *Paris*, which is the Mother of all the others, and on which they are all modeled, beginning by those of the Faculty of *Theology*: Therefore,

Ever since the Institution of this *University*, the Faculty of *Theology* has always flourished in it; and all Disputes in religious Matters have always been referred from all Parts of the Christian World to its Decisions; *Luther* himself calling it the Mother of Learning, and the Source of Truth, and pretending to be ready to submit himself to its Judgment, on the Points controverted between the Catholick Church and him.

This Faculty acquired a very great Lustre in the Time of *Peter Lombard*, Bishop of *Paris*, commonly called *Master of the Sentences*, because he composed a Book of them, and who died in 1164; and instead of losing any of that Lustre, as several other *Universities* have done, it has preserved it to this Day.

Though the *Theology* may be taught in several Colleges of the *University*, the two most celebrated Schools of that Kind, are those of *Sorbonne* and of *Navarre*. The greatest Part of the Doctors have espoused no Houses; which, notwithstanding, there are several of the House and Society of *Sorbonne*, and several of the House of *Navarre*.

There are, besides, some Doctors, who have only the Right of *Hospitality*, and call themselves of the House of *Sorbonne*, *Sorbonici*, or *Hospites*, or *de familia Sorbonica*, but not *Socii*, of the Society of *Sorbonne*.

If the House of *Sorbonne*, founded in 1254, by *Robert de Sorbone*, is the most famous for Persons eminent in Learning and Virtue; it is no less so for the Elegance and Beau-

ty of its sumptuous Edifice, the magnificent Structure of its great Halls, where publick Disputations are held, and Lessons given, as well as the other Parts of the Building of that House, and of its Church; the Cupola thereof is of an extraordinary Heighth, shews very well the Magnificence of the Cardinal *Richelieu*, who has immortalised himself in that Work, and has made of it a Temple, dedicated to his Memory.

The Provisor of the House of *Sorbonne*, and of that of *Navarre*, (who is like the Chancellor of the *University* of *Oxford*) is most commonly the Archbishop of *Paris*.

There are six Doctors, Professors in *Sorbonne*, who give Lessons every Day, during an Hour and half; viz. Three in the Morning, and three in the Afternoon: And four Professors in *Navarre*, two in the Morning, and two in the Afternoon.

The Colleges for the Canonical and Civil Laws, which are in the Street of *St. John de Beauvois*, have also six Professors, who give publick Lessons, three in the Morning and three in the Afternoon. The late King *Louis XIV.* instituted a Professorship for the *French* Law, called *Le droit François*.

The Faculty of MEDICINE, is as antient as the Institution of the *University*, the College thereof is in the Street of the *Bucherie*, ever since 1469, where several eminent Physicians have been educated, particularly the learned *Fernel*, Physician to King *Henry II.* In 1608 a large anatomical Theatre was erected in that College.

There are besides publick Lessons of Botany given, at the royal Garden of medicinal Plants at *Paris*; as also Lessons of Pharmacy and Anatomy.

The Faculty of *Arts*, is the Mother of all the others, and for which the Schools were first founded. The Chief of the whole *University*, called *Rector*, is always taken from that Body, and never from the other Faculties. The Day of the Procession of the Rector, which is made four Times a Year, the Professors give no Lesson: But that Day all the Faculties meet at the Convent of the *Mathurins* in *St. James's-Street*, whence they proceed in Order to the Church appointed by the Rector, each Faculty in their Formalities, and the Doctors of every Faculty with their Mantelets of Ermines.

The Rector, as Chief of the *University*, which the Kings of *France* call their eldest Daughter, has the Precedency of all Sorts of Persons, the Princes of the Blood excepted; it is even said that he has a Right to precede at the publick Acts, the Pope's Nuncio, the Ambassadors, and the Dukes and Peers of *France*. At the King's Funeral, he walks even with the Archbishop of *Paris*, and by his Side.

He wears, while invested with his Dignity, a violet Sash, his Robes of Ceremony are a Violet Gown girdled with his Violet Sash, with Gold Glands at both Ends. To his Side is tied an old fashion Purse, called *Escarcelle*, of Violet Velvet, garnished with Gold Lace and Buttons, his Mantelet of white Ermine, comes down all round as far as the Middle of his Arms.

This

This Dignity is elective, and lasts but three Months, unless it was judged proper to continue the same Person, six or nine Months.

The Faculty of Arts is divided into four Nations: 1. The Nation of *France*. 2. The Nation of *Picardy*. 3. The Nation of *Normandy*. 4. The Nation of *Germany*, which includes all the other foreign Nations, viz. *English*, *Irish*, *Scotch*, *Italians*, &c. which Nations are divided besides into very large Provinces.

The Titles or Epithets which those different Nations take, when their Procurator speaks in the publick Assemblies, are: *Honoranda Gallorum Natio*, for the Nation of *France*: *Fidelissima Picardorum Natio*, for that of *Picardy*: *Veneranda Normanorum Natio*, for that of *Normandy*: And *Constantissima Germanorum Natio*, for that of *Germany*.

The three superior Faculties take their Titles likewise: And when that of Theology speaks, she styles herself, *Sacra Theologiae Facultas*: That of the Law, *Consultissima Decretorum Facultas*: And that of Medicine, *Saluberrima Medicorum Facultas*.

The University of *Paris* consists of 55 Colleges; that of *Sorbonne* is the most celebrated of them all, as already mentioned, being the first in Rank.

The House of *Navarre* is the next; and was founded by *Jane* of *Navarre*, Countess Palatine of *Champagne* and *Brie*, Wife of *Philip the Fair*, King of *France*, in 1304.

Roul of *Harcourt*, Prebend of the Cathedral Church of *Paris* founded in 1280, in the Street of *La Harpe*, the College of *Harcourt*, in favour of the poor Students of the four Dioceses, of *Coutances*, *Bayeux*, *Evreux*, and *Roüen*, in *Normandy*.

Charles le Moyne, Cardinal and Legate in *France*, bought in the Year 1302, under the Reign of *Philip the Fair*, the antient House of the Hermits of *St. Augustin*, and founded there the College, which bears the Name of *Cardinal le Moyne* to this Day; which on one Side reaches to the River *Seine*, joining the Gate of *St. Bernard*, and on the other the Street of *St. Victor*, near the Gate of the same Name.

William Bonnet, Bishop of *Bayeux*, in *Normandy*, founded the College of the same Name in the Street of *La Harpe*, in the Year 1308, for the poor Scholars of the Dioceses of *Le Mans* and *Angiers*; because he was born in the City of *Mans*, and had studied at *Angiers*.

Guy of *Laon*, and *Roul* of *Presle*, two Advocates in the Parliament of *Paris*, founded in 1339 the antient College of *Laon*, at present called *Beauvois*; but the Misunderstanding between the Pursers occasioned that it was divided in two, each of the Name of its Founder. And *Gerard* of *Montague*, Advocate-General in Parliament, and Prebend of the Churches of *Paris* and of *Rheims*, left by his Will, in the Year 1339, his Palace of the *Golden Lion*, to the Scholars of the said College of *Laon*, on Condition that they should go and lodge in it, and establish their Schools there a Year after; which was executed by the Commissary of the Bishop of *Laon* their Superior.

Giles Asselin, Archbishop of *Roüen*, of the House of *Montague*, otherwise called *Lisenois*, founded in the Year 1314, that College, which for a considerable Time was called of the *Asselins*, and afterwards of *Montague*. *Peter* of *Montague*, Cardinal and Bishop of *Laon*, had it rebuilt in 1388, and afterwards his Nephew and Heir, *Louis* of *Montague*, caused it to be much increased in the Year 1392. *John Standoc*, Doctor of the Faculty of Theology, and Lord of *Villette*, repaired it in the Year 1480, and instituted in it the Order of the Poor of *Montague*, vulgarly called *Capettes*.

M. Bertrand, Archbishop of *Narbonne*, founded in the Year 1317, the College of the same Name, in the Street *La Harpe*, in favour of the poor Scholars of *Languedoc*. A Cardinal of the House of *Lorraine*, and Archbishop of the same City of *Narbonne*, has restored it.

Geoffrey du Plessis, Secretary of King *Philip V.* having embraced the monastick Life in the Monastery of *Marmoutier*, gave one of his Houses at *Paris* the 14th of August 1331, for a College in favour of the Monks of the said Monastery.

He gave likewise another House for another College, under the Name of *St. Martin*, but after his Death, it

was called by the Name of *Plessis*, to render his Memory more considerable.

Jane Queen of *France* and *Navarre*, Countess of *Arras*, Palatine of *Burgundy*, and Lady of *Salins*, Wife of *Philip* of *Valois* King of *France*, founded the College of *Burgundy*, for those of the *Franche comté*, in the Year 1331.

The other Collèges are, that of the four *Mendicants*, founded by *St. Louis* King of *France*, at the same Time with the *Sorbonne*, of the *Bernardins*, of the *Norbertins* or *Premonstré*, founded in the Year 1256; of *Clugny*, founded in the Year 1269, of the Treasurer of *Notre-Dame* of *Roüen*, founded by *William* of *Saone*, Treasurer of *Notre-Dame* of *Rouen*: Of *Cholets*, founded in 1289, by *John Cholet*, Bishop of *Beauvais*, Cardinal and Legate in *France*: Of *Beauvais* or *Dormans*, founded by *John* of *Dormans*, Bishop of *Beauvais*, and Chancellor of *France*, in the Year 1365. Of *Arras*, founded in the Year 1332, by *Nicolas* Abbot of *St. Wast* of *Arras*: Of the *Lombards*, founded in the Year 1333, by *Andrew Chini* born at *Florence*, and Bishop of *Arras*, for the poor Scholars of *Italy*: Of *Tours*, founded in the Year 1333, by *Stephen* of *Bourgueil*, Archbishop of *Tours*: Of the *Ave Maria*, founded by *John* of *Hubaut*, President in the Inquests, in the Year 1339: Of *Authun*, or Cardinal *Bertrand*, founded in 1341 by *Peter Bertrand* Cardinal, and Bishop of *Authun*: *Mignon*, founded in 1343, by *Michel Mignon*: Of *Cambray*, or of the three Bishops, founded in 1356, by *Hugues* of *Pommareo* Bishop of *Langres*, by *Hugues* of *Arciaco* Bishop of *Laon*, and afterwards Archbishop of *Rheims*, and by *William* of *Auxona*, Bishop of *Cambray*: Of *Becourt*, or *Boncourt*, founded by *Peter* of *Boncourt*, Knight: Of *Tournay*: Of *Justice*, founded by *John* of *Justice*, Chancellor of the Cathedral Church of *Bayeux*, and Prebend of our Lady at *Paris*, in the Year 1353: Of *Boissy*, founded by *Stephen* of *Boissy* in 1354. Of *Master Gervois*, founded in 1370, by *M. Gervois Christien*, a Prebend of the Cathedral Churches of *Paris* and *Bayeux*, and first Physician to King *Charles V.* Of *Damville*, founded by *John* of *Damville*, Secretary of King *Charles V.* Of *Cannal*, which was begun in 1380 by *Galeran Nicolas*, called *Gravia*; and augmented afterwards by *John Guyse*, Doctor in Physick, and Prebend of the Cathedral Churches of *Paris*, *Nantes*, and *Cornwal* in *Britanny*: Of *Fortet*, founded in 1391 by *Peter Fortet*: Of *St. Michel*, founded in 1404, by *William* of *Chanac* Bishop of *Paris*, in honour of the Archangel *St. Michel*, which is called still of his Name *Chanac*, and of *Pompadour*, the Title of his illustrious House: Of *Treguier*, founded by *William Coetman*, Chantor of the Cathedral Church of *Treguier* in *Britanny* in the Year 1411, to which in 1570 was annexed another small College of *Britons*, called of *Leon*, or *Kembrec*, near *St. Hilary*: Of *Lisieux*, or *Torcy*, founded in 1414, by *William* of *Estouteville*, Bishop of *Lisieux*; which *l'Estoille* Abbot of *Fescam*, and *Colard* of *Estouteville*, Knight, Lord of *Torcy*, his two Brothers, finished after his Death: Of *Rheims*, founded by *Guy* of *Roye*, Archbishop of *Rheims*, in the Year 1412, which having been ruined by the *English*, *Charles VII.* united to it that of *Rhetel*, already founded by *Walter* of *Launoy*, Knight: Of *Coqueret*, founded by *Nicole Coqueret*, Prevost and Prebend of the Cathedral Church of *Amiens*: Of *La Marche*, and *Winville*, founded in 1423 by *William* of *La Marche*, a Prebend of the Church of *Toul*; and by *M. Beuve* of *Winville*, born at *Winville* in *Lorraine*: Of *Sees*, founded by *Gregory l'Anglois*, and finished by his Brother *John l'Anglois* in 1427. Of *La Mercy*, founded by the Prince *Alain*, Lord of *Albret*, in favour of the Religious of the Order of *La Mercy*: Of the *Mans*, founded by the Testament of *Philip* of *Luxembourg*, Cardinal and Bishop of *Mans*, in the Year 1526: Of *St. Barbe*, founded by *Robert de Gast* in 1556: Of the *Grassins*, founded by *Peter Grassin*, Counsellor in Parliament, for the poor Scholars of *Sens* in *Burgundy*, in the Year 1569.

These are very near all the Colleges of the University of *Paris*, which *Philip* the Fourth, by an Edict of the Year 1295, *Louis Hutin* his Son, and *Philip* of *Valois*, in 1340, honoured with very great Privileges. The Provost of *Paris* bears the Title of Conservator of the University; where it must be observed, that almost all

the Colleges have been founded for poor Students, who alone enjoy the Benefits of the Foundation; all others who study in those Colleges being obliged to pay for their Board, Lodging, &c. Learning being given *gratis* in all those Colleges to every Body, without Distinction; except the Expences, those who will take their Degrees, in any of the four Faculties, which are pretty great, particularly those of Doctor in Theology. It must be observed likewise, that there are several Colleges founded for Foreigners, which laudable Example has not been followed by any other Universities in the Christian World; and that only for poor Foreigners, lest those who are always ready to give a bad Sense to the best Intentions of the *French*, should say that it was done with the View of engaging Foreigners to come and spend their Money in *France*, under Pretence of studying in the University. Though a great Number of rich Foreigners come to study in *Sorbonne*, on purpose to have the Honour to take up their Degrees in that College, which before the Reformation was always considered as the most celebrated College in the Christian World; and is accounted such still, by all the States who profess the *Roman* Catholick Religion, all the greatest Difficulties in Matters of Religion, or on Points of Conscience, being referred from all those Parts to the Decision of the Society of *Sorbonne*. *Henry VIII.* King of *England*, consulted them on his Divorce, thinking that if he could have it approved by them, he wanted no better Authority; but he was disappointed.

Montpelier, for the Faculty of Medicine, was for several Ages the most famous of all *Europe*; and not only the Kings of *France*, but likewise all other Sovereigns, have granted to it several very great Privileges, among which this is one, that a Physician who has took up his Degrees at *Montpelier*, should practise Medicine in their Dominions, without undergoing an Examen, or being obliged to obtain any other Licence.

Philip the Fair, the Protector of the Muses, founded the University of *Orleans* in 1312, to which he granted a great many Privileges, in favour of those, who applied themselves to teach the Imperial Laws. He established royal Judges in it, only to be the Protectors and Conservators of the Privileges granted to the Scholars. Pope *Clement V.* born at *Bordeaux*, who had studied at *Orleans*, confirmed by a Bull given at *Lyons* in 1367, what his Predecessors and King *Philip* had done in favour of the University.

The University of *Orleans*, was founded on the Model of that of *Paris*; it has the same Dignities, and the Civil Law is taught in it by four Professors of Jurisprudence; but it has no Faculty of Medicine.

The *Germans*, above all other Nations, enjoy very considerable Privileges in it, granted to them by our Kings; and authentickly confirmed by *Henry IV.* by his Letters Patent of the 15th of *July* 1608, and by those of the Month of *June* 1616, dated at *Paris*. They have in it a very handsome Library, very well furnished with useful, valuable, and curious Books for the Use of the Scholars of their Nation. Formerly the great Number of Scholars who flocked thither from all Parts, were comprised under ten Nations, *viz.* the *French*, *German*, *Lorrain*, *Bourguinone*, *Champenoise*, *Normandy*, *Picardy*, *Tourangoise*, *Aquitannick*, and *Scotch*: But since by an Arret of the Parliament of *Paris*, in the Year 1538, under the Reign of *Francis I.* they were reduced to four, *viz.* the *French*, which includes the *Bourguignons*, *Gasccons*, and *Tourangeaux*: The *German*, which includes the *Lorrains*: *Picardy*, which includes the *Champenois*: And the *Normand*, which includes the *Scotch*.

The University of *Angiers*, was founded in 1348, by *Louis II.* Duke of *Anjou*, Son of *Louis I.* and Grandson of King *John*; in favour whereof he obtained from the King and from the Pope, the Privileges and Immunities of the Students; and royal and apostolical Conservators to maintain them in those Privileges. *Henry* Duke of *Anjou* Brother of King *Charles IX.* favoured and increased the said University, to which was added the Faculty of Medicine; its first Institution being only for the Law. It has three famous Colleges, *viz.* the *New College*, the *College of the Iron Gate*, and the *College of the Fromagerie*. That University has produced very great Lawyers, as

Boyer Chancellor of *France*, *Lazarus Bouf*, *Francis Baldouin*, *Eghinard Baron*, *John Bodin*, and others.

The second University in *Europe*, is that of *OXFORD*, in *England*, according to Mr. *Chamberlayne*, who says that it hath been very antiently reckoned the second University among the four Principal of *Europe*, *Paris* having been usually named in the first Place.

Oxford, says he, is an antient City, consisting of two Sorts of Inhabitants, *viz.* *Students* and *Citizens*, living among one another, though wholly separate for Government and Manners; for when the Kings of *England* perceived that they could not (as at *Paris*) be separated by a River, they thought proper to make them separate Bodies, by different Privileges, and a different Form of Government; so that they have both different Limits, a different Manner of administering Justice, different Power, and different Magistrates; the Chancellor of the University, and in his Absence, the Vice-Chancellor, being superior to the Mayor of the Town in Affairs of Moment, even those that concern the City itself.

Over the University, next under the King, is the Chancellor, who is always a Person of the first Rank, elected by the Students in a Convocation, which eminent Post is for Life. His Office is to take Care of the Government of the whole University, to maintain the Liberties and Privileges thereof, to call Assemblies, to hear and determine Controversies, to summon the Courts, punish Delinquents, &c.

This great Honour is enjoyed at present by — *Butler*, Earl of *Arran*.

The next in Dignity among the Officers of the University of *Oxford*, is the High Steward, who is at the Nomination of the Chancellor, and must be approved by the University; which Office is also for Life. He is to assist the Chancellor, Vice-Chancellor, and Proctors, in the Execution of their respective Offices; and also hear and determine capital Causes, according to the Laws of the Realm, and the Privileges of the University, whenever the Chancellor requires it.

The third Office is that of Vice-Chancellor, who is nominated every Year by the Chancellor, and is commonly the Head of some College. He is to supply the Place of the Chancellor in his Absence; to take Care that Sermons, Lectures, Disputations, and other Exercises, be performed; that Hereticks, Fanaticks, Non-conformists, Panders, Bawds, and Whores, &c. be expelled the University, and kept from the Conversation of the Students; that the Proctors, other Officers, and publick Servants of the University, perform their respective Duties; that Courts be duly called, and Law-Suits determined without Delay.

Next are the two Proctors, chosen every Year out of the several Colleges, by Turns; these are to assist in the Government of the University, more particularly in what regards scholastick Exercises, and taking of Degrees. It is also their Office to punish all Infringers of the Statutes, or Privileges of the Universities; all Night-walkers, &c. and lest the Students should be wronged, they are to examine carefully all Weights and Measures.

Next is the publick Orator; whose Office is to write Letters, when commanded by the Convocation or Congregation; and also make solemn Harangues at the Reception of Princes, or other great Person that comes to see the University.

There is a Custos Archivorum, or Keeper of Records, whose Office is not only to collect and keep the Charters, Privileges, and Records of the University, but also to be always ready to produce them before the chief Officers, and plead the Rights and Privileges of the said University.

Lastly, is the Registerer of the University, whose Office is to register all the Transactions in Convocations, Congregations, Delegacies, &c.

Besides the great Officers above-mentioned, there are certain publick Servants of the University, called *Beadles*, to summon, admonish, or pray: They are six in Number, three whereof are called *Squire Beadles*, and carry large Maces of Silver gilt; the other three are stiled *Yeomen Beadles*, and carry large Silver Maces ungilt.

Their Office is to wait always on the Vice-Chancellor in publick, and at his Command to seize any Delinquent, and

and carry him to Prison, to publish the Calling of Courts or Convocations, to conduct Preachers to Church, or Professors to School, &c.

On more solemn Occasions there is a seventh, that carries in his Hand a Silver Rod, and is thence called the *Verger*, who with the other Six attend the Chancellor, and are ready to execute his Commands, and to wait on grand Compounders, &c.

Several of the Kings of *England* having been very learned themselves, and therefore great Encouragers of Learning, and Protectors of the Learned, have enlarged from Time to Time the Privileges of the *Universities*.

By a Charter of *Edward III.* the Mayor of *Oxford* is to obey the Orders of the Vice-Chancellor, and to be subject to him.

The Mayor, together with the Burgeses of *Oxford*, and the High Sheriff of *Oxfordshire*, take every Year, in a solemn Manner, an Oath, administered by the Vice-Chancellor, to observe and preserve the Rights, Privileges, and Liberties of the *University of Oxford*.

And every Year, on the Day of *St. Scholastica*, which is the 10th of *February*, a certain Number of the principal Burgeses pay publickly, and in a solemn Manner, a Penny to each, in Token of their Submission to the *University*.

No Provisions to be taken by the King's Purveyors, within five Miles of *Oxford*, unless the King himself comes thither.

King *James I.* honoured both *Universities* with the Privilege of sending each two Burgeses to Parliament.

Both *Universities* are free from the Jurisdiction and Visitation of any but the King himself, or whom he pleases to appoint.

By Charter of *Henry IV.* it is left to the Choice of the Vice Chancellor, whether any Member of the *University*, actually residing in it, accused of Felony or High-Treason, shall be tried by the Laws of the Realm, or by the Laws or Customs of the *University*; though at present where Life or Limb is concerned, the Criminal is left to be tried by the Laws of the Realm.

No Students of *Oxford* may be sued at common Law for Debts, Accounts, Contracts, Injuries, &c. but only in the Court of the Vice-Chancellor, who has Power to determine Causes, to imprison, to inflict corporal Punishment, to excommunicate, to suspend, and to banish.

Antiently in *Oxford* the Students, without any Distinction of Habit, lived in Citizens Houses, and had publick Places where they met to hear Lectures, and dispute. Afterwards they lived together in divers Houses, called either *Jins* from the *Saxon*, or *Hostels* from the *French*, and at present are named *Halls*, where every Student lived wholly at his own Expence; till by a noble Emulation among the *English* Nobility and Gentry, Colleges were founded at different Times, to maintain such Students as by Merit and Worth should be chosen (not for poor Students, as in *France*) in Lodging, Diet, Cloaths and Books, and Professors to instruct them.

Of such endowed Colleges, there are eighteen in *Oxford*, and seven Halls, where, with the like Discipline, Students live upon their Means, excepting only some certain Exhibitions, or annual Pensions, annexed to some of them.

The Colleges are those which follow, according to the Order of their Foundation.

University College, founded Nobody knows when; for some Authors will have it, under King *Alfred*, by *William* Archdeacon of *Durham*, in the Year 873, which is a Fable; others in the 12th Year of *William the Conqueror*, by another *William*, Bishop of *Durham* in 1081, which is another Fable; and the Generality of them, in the 12th Century, without marking precisely the Year.

Baliol College, founded in 1263, under King *Edward I.* by *John Baliol*, Father to *John Baliol* King of *Scotland*.

Merton College, founded in 1277, in the Reign of *Henry III.* by *Walter Merton*, Canon of *St. Paul*, and of *Salisbury*.

Exeter College, founded in 1316, under *Edward II.* by *Walter Stapleton*, Bishop of *Exeter*; and augmented by Sir *William Peter*, Knight, in 1566, under Queen *Elizabeth*.

Oriel College, founded in 1323, under *Edward II.*

by Sir *Adam Browne*, the King's Almoner; though the Record attributes this Foundation to the King himself.

Queen's College, founded in 1340, under *Edward III.* by *Robert Englishfield* (on his own Ground) the Queen's Chaplain.

New College, founded in 1379 in the Reign of *Richard II.* by *William Wickham*, Bishop of *Winchester*.—He also founded a College in *Winchester* in 1389, which he called by the same Name of *New College*.

Lincoln College, founded in the Year 1430, under *Henry V.* by *Richard Fleming* Bishop of *Lincoln*; and augmented in 1479, in *Richard* the Third's Time, by *Thomas Rotheram*, also Bishop of *Lincoln*.

All Souls College, founded in the Year 1437, in the Reign of *Henry VI.* by *Henry Chicheley*, Archbishop of *Canterbury*. The King himself gave to it four Priories, viz. *Alberbury* in *Salop*, *Romney* in *Kent*, *Languenith* in *South Wales*, *Weden Pinkney* in *Northamptonshire*: Wherefore the Foundation of this College was attributed to his Majesty, as appears by the Charter kept in the Tower of *London* among the Records. He also founded *Bernard College*, since suppressed by *Henry VIII.* and re-edified afterwards by Sir *William White*, under the Name of *St. John's College*. Moreover he founded a College at *Higbam Feris*, with Alms-houses.

Magdalen College, founded in the Year 1459, under *Henry VI.* by *William Wainflet* Bishop of *Winchester*. He built likewise a great Part of *Eaton School*, began by *Henry VI.* and a Free School at *Wainflet* in *Lincolnshire*, seven Miles from *Alford* towards *Boston*.

Brazen-Nose College, was founded in the Reign of *Henry VII.* by *William Smith* Bishop of *Lincoln*, who died in the Year 1513.

Corpus Christi College, was founded in the Reign of *Henry VII.* by *Richard Fox* Bishop of *Winchester*; and he endowed it with 110 l. 8 s. 11 d. of a yearly Revenue, for ever.

Trinity College, was founded in the Year 1556, under Queen *Mary*, by Sir *Thomas Pope*, Knight; which College was first founded in 1370, in the Time of King *Edward III.* by *Thomas Hatfield* Bishop of *Durham*, and by him named *Durham College*, for eight Monks and seven Clerks, admitted by the Prior of *Durham*. *Robert Walworth* Prior of *Durham*, endowed it with three Bovates of Land, with the Advowson of the Church of *Radington*: Which College at the Suppression by *Henry VIII.* was estimated by the Visitors at 115 l. 4 s. 4 d. of yearly Revenue.

St. John's College, was founded in the Year 1557, under Queen *Mary*, by Sir *Thomas White* Merchant Taylor, who endowed it with 600 l. per Annum.

Wadham College, founded by *Nicolas Wadham* of *Merefield* in the County of *Somerset*, Esq; and finished in 1613, by his Widow the Lady *Dorothy*, Sister to the Right Honourable *John Lord Peter* of *Writtle*, who endowed it with 800 l. of yearly Revenue for ever.

The Halls are seven in Number, viz.

- | | |
|--------------------------|----------------------------|
| 1. <i>Magdalen Hall.</i> | 5. <i>Gloucester Hall.</i> |
| 2. <i>Edmond Hall.</i> | 6. <i>St. Mary Hall.</i> |
| 3. <i>Alban Hall.</i> | 7. <i>Hart Hall.</i> |
| 4. <i>New Inn.</i> | |

Each of them has its particular Head or Chief, called Principal.

These Colleges have each their Lectures, Disputations, &c. and in some of them publick Lectures for all Comers.

The Discipline of these Colleges and Halls, is as follows:

First, all that intend to take any Degree, are to take their Diet and Lodging, and have a Tutor constantly in some College or Hall: Then they are to attend all Exercises, to be subject to all Statutes, and to the Head of the House.

Next they are to be subject to the chief Magistrate of the *University*, and to perform publick Exercises. To suffer to be shut up by Night in their several Houses; never to be seen abroad out of their Chambers, much less out of their Colleges, without their Cap and Gown, which is to be black; only the Sons of the first Nobility being indulged therein, except the Doctors who are allowed to wear Scarlet Gowns.

The Degrees taken in the *University of Oxford*, are only

only two in the four Faculties, viz. *Bachelor* and *Master*, in the Arts; and *Bachelor* and *Doctor* in Theology or Divinity, Medicine, and Law. In the *French* Universities there is but one Degree in the Arts, viz. that of *Master*; and three in the other Faculties, viz. *Bachelor*, *Licentiate*, and *Doctor*.

Every Year at the Act or Time compleating the Degree of *Master*, both in the three Professions and Arts (which is always the *Monday* after the 6th of *July*) there are (unless something happens extraordinary) great Solemnities, not only for publick Exercises, but Feasting, Comedies, and a mighty Concourse of Strangers from all Parts; whereby and with the set Fees on such Occasion, it costs a Doctor of Divinity, Physick, or Law, about a hundred Pounds Sterling, and a Master of Arts twenty or thirty Pounds Sterling.

Such Solemnities in the *French* Universities, are usually preceded by three very severe Examens, and as many publick Disputations, where the Candidate is obliged to answer to all those who are pleased to dispute against him, without the Assistance of his Professor; and I know of no other Feasting but a Treat he gives to the College to which he belongs, and to the Doctors who have examined him, and assisted at his Theses. In *Sorbonne* the Expences on such Occasions exceed very often three or four hundred Pounds Sterling.

The Time required by the Statute for studying in the University, before the taking up of the afore-mentioned Degrees, is as follows:

To take the Degree of *Bachelor of Arts*, four Years are required, and three Years more for to be *Master of Arts*.

Now the Year is divided into four Terms. The first begins the 10th of *October*, and ends the 17th of *December*; and is called *Michaelmas Term*.—The second called *Hilary* or *Lent Term*, begins the 14th of *January*, and ends the *Saturday* before *Palm-Sunday*: The third, called *Easter-Term*; the fourth is called *Trinity Term*, which begins the *Wednesday* after *Trinity Sunday*, and ends after the Act, sooner or later, as the Vice-Chancellor and Convocation thinks proper.

To take the Degree of *Doctor of Divinity*, the Student must have first taken the Degree of *Master of Arts*, and then after seven Years more, he is capable of being *Bachelor of Divinity*; and then four Years more are requisite to take the Degree of *Doctor*.

To take the Degree of Doctor in *Medicine*, and of *Law*; three Years after *Master of Arts*, one may take the Degree of *Bachelor*, and four Years afterwards that of *Doctor*.

In the *French* Universities, the Intervals of Time are not so much minded (though there are some requisite, but not such long ones) as the Capacity of the Candidates; for if he be not capable to undergo his several Examens, which are very severe, particularly in Theology, and maintain his *Publick Theses*, with a general Applause, he must not expect to be admitted to receive his Degrees. Besides, when he has began his Studies he must go through it, without those long Intervals, in which one may forget what he has learned in the Schools.

What has been said of the University of *Oxford*, may be said likewise of that of *CAMBRIDGE*; except in the following Particulars.

That the Chancellor of *Cambridge* is not so *durante Vita*, but may be elected every three Years; or remain in the said Office, with the tacit Consent of the University. He has under him a Commissary, who holds a Court of Record of Civil Causes, for all privileged Persons, and Scholars under the Degree of Master of Arts, where all Causes are tried and determined by the Civil and Statute Laws, and by the Customs of the University.

They have also a *High Steward*, chosen by the Senate, and holds by Patent from the University.

The *Vice Chancellor* is chosen every Year, on the Third of *November*, by the Senate, out of two Persons nominated by the Heads of the several Colleges and Halls.

The two *Proctors* are chosen every Year, as at *Oxford*, according to the Circles of Colleges, and Halls.

There are chosen, after the same Manner, two called *Taxers*, who, with the Proctors, have the Care of Weights and Measures, as Clerks of the Market.

There is a *Custos Archivorum*, or University Register.

There are, also, three *Squire Beadles*; and one *Tec-man Beadle*.

This University, like that of *Oxford*, enjoys many Privileges granted by the Kings of *England*; among which these are the principal: Every *Michaelmas-Day* the Mayor of the Town of *Cambridge*, at his Entrance into his Office, takes a solemn Oath before the Vice-chancellor, to observe and maintain the Privileges, Liberties, and Customs of the University.—On the *Friday* before *St. Simon* and *St. Jude*, at a *Magna Congregatio*, in the Church of *St. Mary*, appointed for the Assembly of the whole University, the Mayor brings with him two Aldermen, four Burgesses, and two of every Parish, to take their Oath before the Vice-Chancellor, for the Search of Vagabonds, suspected Persons, &c. at the same Time are sworn fourteen Persons for the University, and fourteen for the Town, for the cleansing and paving the Streets.

The University has also a Court-leet held twice a Year, which takes Notice of all Nuisances, &c.

In *Cambridge*, there are none unendowed Houses appointed for Students, as in *Oxford*, and the Houses endowed are no more than sixteen; but those generally so large, that the Number of Students is commonly little different from those of *Oxford*, the Halls being endowed, and privileged as the Colleges, and differ only in Name: They are as follows, according to their Antiquity.

St. Peter College, was founded in the Year 1256, under King *Henry III.* by *Hugh Balsbam* Prior of *Ely*; and afterwards enlarged by *Edward II.* by *Walter Robert Lyr-ling*, who gave a House with the Appurtenances, sometimes inhabited by the Religious called *Fratres de sacco*. The Founder was made afterwards Bishop of *Ely*; and he finished the College in 1284.

The College of *St. Michael*, was founded by *Hervens de Stanton*, some Time Chancellor of the Exchequer, and a Canon of *York* and *Wells*; who obtained a Licence from King *Edw. II.* in the 17th Year of his Reign, to build that College for a certain Number of Scholars and Chaplains, according to the Rules he should prescribe; granting further, by the same Licence, to the said *Harvey*, Power to unite to the said College the Advowson of *St. Michael's* Church in *Cambridge*. The said College was afterwards more enlarged, and taken in process of Time, into *Trinity College*, founded by *Henry VIII.*

University-Hall, or College, founded in 1326, by the Chancellor and Masters of the University of *Cambridge*. King *Edward III.* in the 20th Year of his Reign, gave Licence of *Mortmain*, to the Master and Scholars of the said College, to take Lands and Tenements, to the yearly Revenue of forty Pounds. Since that Time it was much increased by Master *Walter Tacksted*, Master of the same College. But now it is united to the Foundation of the Lady *Elizabeth del Burgo*, Countess of *Clare*.

King's Hall, or College, had its first Beginning of King *Edw. II.* who maintained there for a Time 32 Scholars, who afterwards were paid sometimes by the Sheriff of *Cambridge*, sometimes by the Prior and Convent of *St. Medu*, and sometimes out of the Exchequer. But King *Edw. III.* by his Charter, dated the 7th Day of *December*, in the eleventh Year of his Reign, erected there a College to the Honour of God, his blessed Mother the Virgin *Mary*, and all the Saints, for a Master and 32 Scholars, calling it *King's Hall*, the Ground whereof he purchased of Master *Gilbert Croiland*, and endowed it afterwards with Lands and Possessions; and it continued a College till the Time of King *Henry VIII.* who united it to his own Foundation of *Trinity College*.

Clare Hall, was founded by Lady *Elizabeth de Burgo*, some Time Wife of *John de Burgo* Earl of *Veton* in *Ireland*, Daughter of Sir *Gilbert* of *Clare* Earl of *Gloucester*, and one of the Heirs of Sir *Gilbert* of *Clare* her Brother. She was first married to *John Burgh*, Earl of *Ulster* in *Ireland*, afterwards to *Theobald* of *Verdon*, and thirdly to Sir *Roger Damary*. She taking into her Foundation the afore-mentioned *University Hall*, by the Resignation of Master *Walter Thacksted*, Master thereof, and with the Consent of Mr. *Richard Baden*, the first Founder, called it *Clare Hall*; and became the only Founder thereof in the Time of King *Edw. III.* about the Year 1347.

Pembroke-Hall, was founded by the Lady *Mary* of

of *Valentia*, Countess of *Pembroke*, Wife of *Audomare*, of *Valentia*, Earl of *Pembroke*, and Daughter of *Guido*, Earl of *St. Paul* in *France*. She obtained a Privilege of King *Edward III.* (whose Cousin she was) to found this College for a Master and Thirty Scholars, or more, at her Pleasure: And to assign them, for their Abode, a Place in *Cambridge* of her own Inheritance, with three other Messuages, which she purchased, and 100 *l.* of Yearly Revenue, *Anno* 1347.

Corpus Christi College, commonly called *Bennet-College*, was founded by the Alderman and Brethren of *Corpus Christi Guilde*, and the Brethren of our Lady *Guilde*, in *Cambridge*, at the Instance of *Henry Duke of Lancaster*, who in the 26th Year of King *Edward III.* obtained a Licence of Mortmaine for the said Alderman and Brethren, that upon a Messuage to them belonging in *Cambridge*, they might build a College for Scholars, Chaplains, and others, to be governed by a Master, according to their Rules. By the same Licence was also appropriated unto the College for ever, the Advowson of *St. Bennet's Church* standing before their Gate. This Duke of *Lancaster*, in the 28th Year of the said King *Edward III.* was elected Alderman of the said Guilds, who recognized the Statutes of the said Guilds, says my Author.

Trinity-Hall, was in antient Times an Hôtel or House of Study; and in the Reign of *Edward III.* *John Crandell*, Prior of *Ely*, and his Convent, procured the said Hôtel for a College for the Monks; to this House were added three other dwelling Houses, by Master *Richard Ling*, Chancellor of the University, and *Archibald of Norwich*, Master *Walter Elveden*, and *M. Simon Rekingal*, Rector of *Rolesby*. — In the 28th Year of the said King, Mr. *Robert Stratton*, *J. Trunch*, *Walter Backton*, *Walter de Aldeby*, and *Peter Pitterings*, gave towards the Enlargment thereof, one Messuage, and seven Paces of void Ground; and likewise the said *Walter Backton*, *Peter Pitterings*, and *Thomas Walsingham*, gave another Messuage, called *Drake's Entry*; all which being thus laid together, were purchased afterwards, by Master *William Bateman*, Bishop of *Norwich*, who by the King's Licence, built there the College, for the most Part, as it now stands; and indow'd it with Lands and Possessions, and was the Founder thereof; he died at *Avignon* in *France*, the 6th of *January* 1345.

Gonville Hall, was founded by *Edmund Gonville*, Parson of *Tarington* in *Norfolk*, in the 22d Year of *Edward III.* who obtained a Licence at the Suit of Sir *Walter de Manny*, to build a College for a Master and 30 Scholars; where sometimes stood three Houses, and a Garden in *Lurthrow Lane*, which he purchased with his own Money, and in the 26th Year of the same King, that College was enlarged with two other Houses, one of them given by the Chancellor and Masters of the University, and the other by the Masters and Brethren of *St. John's Hospital* in *Cambridge*. This *Edmund Gonville*, left at his Death a considerable Sum to *William Bateman* Bishop of *Norwich*, to finish the said College, which he did accordingly, and called it *Gonville Hall*; it was united afterwards to *Caius College*, under the Name of *Gonville and Caius*.

The College of *God's House*, was first founded by *William Bingham*, Parson of *St. John Zachary* in *London*, on a Tenement, and three Gardens he purchased with his own Money, in *Miln street*; and obtained a Licence of King *Henry VI.* in the twentieth Year of his Reign, to build thereon a College for 25 Scholars and a Provost, to be governed by such Rules and Statutes, made by the said *William Bingham*, *William Wimbel*, *William Milington*, and *William Gull*, Doctors of Divinity, and *John Tilney* Doctor of Law, and the longest Liver of them. — This College was chiefly erected for a Grammar School; few Years afterwards, King *Henry* being determined to found his College of our Lady, and *St. Nicholas*, obtained of the said *William Bingham*, a Resignation of the House and Ground, and in lieu thereof, gave him two other Places in *Preachers-street*, one of them belonging to the Abbot of *Tillic*, and the other to the Priorefs of *Deny*, together with a Licence of Mortmaine for 100 *l. per Annum* for ever, towards maintaining his College; but shortly afterwards, viz. in 1447. the said *William Bingham* resigned likewise, his new College to the King, that his Majesty should be account-

ed the Founder thereof, as he really was; but now, it is annexed to *Christ's College*, founded by the Lady *Margaret*, Countess of *Richmond* and *Derby*.

The King's-College, of our blessed Lady and *St. Nicholas*, was founded by King *Henry VI.* in the 19th Year of his Regin, but the said College having incurred the Displeasure of *Edward IVth*, his Majesty took from it all the Lands which the Founder had given them; and restored them again afterwards, to the yearly Revenue of five hundred Marks. *Henry VII.* finished the fine Chapel began by *Henry VI.* And King *Henry VIII.* had it glazed and paved with Marble; King *Henry VIth's* Design was, that this College should be one of the finest Buildings in the Kingdom.

The College of *St. Margaret and St. Bernard*, commonly called *Queen's-College*, was first began by Queen *Margaret*, Wife of *Henry VI.* and Daughter of *Regnier* King of *Sicily* and *Jerusalem*; who procured a Mortmaine for the same, in 1441, for 100 *l.* annual Revenue, at the Intercession of Mr. *Andrew Ducker*, Parson of *St. Butolph*, in *Cambridge*, sometime Principal of *Bernard Hôtel*, which he purchased and gave to the said College; and purchased likewise, with the Assistance of some others, certain other Tenements, whereupon he built the College, being himself the first President thereof; giving to it afterwards, as well in his Life-time, as by his Will, divers Sums of Money and Parcels of Land; and engaging, besides, *George Duke of Clarence*, *Cecil Dutehes of York*, *Richard Duke of Gloucester*, and *Anne* his Wife, *Edward Earl of Salisbury*, *Maud Countess of Oxford*, and *Marmaduke Lumley*, Bishop of *Lincoln*, sometime Chancellor of the University, to be all Benefactors to it. But this Foundation was since attributed to *Henry VI.* as appears by his Charters dated the third Day of *December*, in the 25th Year of his Reign, who built on his own Ground, where it stands now, in *Miln-street*, for a President, and four Fellows or more, according to the Extent of the Revenues; and to follow the Rules, and Statutes, which were to be devised by Master *John Somersset*, Chancellor of the Exchequer, *John Langton* Chancellor of the University, *Richard Candry*, *Peter Harford*, *Gilbert Northington*, and *Thomas Bolyn*, or by the longest Liver of them; Queen *Elizabeth*, Wife of King *Edward IV.* finished afterwards, what was left imperfect in the Year 1465. and King *Richard III.* endowed it with 500 Marks of annual Revenue in Lands.

Katherine-Hall, in the Reign of *Edward IV.* and in the Year 1475. by *Robert Woollark*, Doctor of Divinity, Chancellor of the University, and Provost of King's College, in the Honour of our blessed Lady and *St. Katherine*, Virgin and Martyr; it was founded for a Master and three Fellows, or more, on a Messuage in *Miln-street*, which he purchased with his own Money; obtaining likewise, of the King, a Licence of Mortmaine for 40 Marks of annual Revenue for ever, for the Support of his College, which was afterwards enlarged by other Benefactors.

Jesus-College, was antiently a Monastery of Nuns of *St. Radegunde*, but the Monastery having been deserted by the Nuns for want of Subsistence, *John Alcocke*, Bishop of *Ely*, obtained Leave of King *Henry VII.* in the Year 1407. to build on the Ground of that ruined Edifice, a College, in Honour of the Holy Trinity, of our blessed Lady, of *St. John the Evangelist*, and of *St. Radegunde*, Virgin, for a Master, Six Fellows, and a certain Number of Scholars, to be governed by such Rules and Statutes, he should digest for them: The Revenues of this College, and the Number of Fellows, were augmented afterwards, at different Times, by Sir *Robert Read*, Bart. Lord Chief Justice of the Common Pleas, Dr. *Elefon*, Dr. *Royston*, and Dr. *Fuller*.

Christ's College, was first begun by *Henry VI.* and after his Decease, continued by Lady *Margaret*, Countess of *Richmond* and *Derby*, Daughter and Heiress of *John Duke of Somersset*, and Mother of King *Henry VII.* on the same Ground where the College of *God's House* stood, in *Preachers-Street*; for which she obtained of the King her Son, a Charter dated the 1st of *May*, in the 20th Year of his Reign, and of *Christ* 1505, giving to it by her Will a Competency for 60 Students, with Servants and other Necessaries. The Abby of

Creke having been dissolved, the Lands thereof were given to this College.

St. John's College, was antiently a Monastery of regular Canons, founded by *Nigel* second Bishop of *Ely*, and Treasurer of King *Henry I.* in the Year 1134, many Years afterwards, *Hugh Balsbam*, otherwise *Norwold*, Bishop of *Ely*, obtained Leave of King *Edward I.* in the Year 1280, to place a certain Number of Scholars in that House, to live with the Monks, dividing between them and the Scholars, with their unanimous Consent, the Lands and Goods of the Monastery; left by expelling the Monks quite, and transferring them to another Place, as he had done Part of them, the Poor should have been deprived of the daily Relief which the Monastery allowed them.

The Lady *Margaret* Countess of *Richmond* and *Derby*, being informed that the Number of Monks was reduced to two only, the House decay'd, and the Lands and Goods wasted, obtained Leave of her Nephew King *Henry VIII.* to build in the same Place a College in Honour of *St. John* the Evangelist; but having been prevented by Death, she left the Execution of her pious Design to her Executors, *Richard Fox* Bishop of *Winchester*, *John Fisher* Bishop of *Rockester*, *Charles Somerset* Lord *Herbert*, afterwards created Earl of *Worcester*, Sir *Thomas Lovel*, Sir *Henry Marney*, and Sir *John St. John*, Knights, *Henry Homby* and *Hugh Ashton*, Clerks; who with the Money she had left, finished the Building, endowed the College with her own Lands, and founded it in 1509, for a Master and 50 Scholars.

Magdalen College, was first an Hostel, or Hall, inhabited by Monks of several different Monasteries (and therefore called then Monks College) who were sent thither from their respective Abbies, to study in the University.

Edward Duke of *Buckingham*, built the Hall of this College in 1519, wherefore it was called for a Time *Buckingham College*. But the Buildings which were left imperfect by the Duke, were perfected afterwards by the Prior of *Ely*, and Abbots of *Ramsay* and *Walden*; and thus continued a Place of Study for the Monks, till the general Suppression of Monasteries made by *Henry VIII.*

At last, the Lord *T. Audeley* Baron of *Walden*, and Chancellor of *England*, founded there a College under the Name of *St. Mary Magdalen*, and endowed with Possessions in the Year 1542; but being prevented by Death from finishing what he had begun, Sir *Christopher Wray* Lord Chief Justice of *England*, repaired and beautified it.

Trinity College, was founded by *Henry VIII.* in the Year 1546, and erected on the same Spot of Ground, where *Edward III.* had built his College, called *King's Hall*; whereunto was joined another College, called *Michael House*, founded by *Harvey de Stanton*, in the Time of *Edward II.* and another House called *Phiswick Hostel*; all which three Houses the King took into his new College, with the Possessions and Buildings belonging thereto, and called it *Trinity College*: The Possessions thereof were much augmented by Queen *Mary*, who gave it three hundred and thirty-eight Pounds of annual Revenue in Lands; and under whose Reign was built likewise the stately Chapel of that College, viz. in the Year of Christ 1557.

Gonville and Caius College, was first begun by *Edmond Gonville*, as heretofore mentioned. *John Caius*, Doctor in Physick, who had been Fellow and Master of the said College, enlarged the House and made it a new Foundation, by giving to it certain Manors and Lands, in the Year 1557, calling it by the Name of *Gonville*, and *Caius College*.

Emanuel College, was founded by Sir *Walter Mildmay*, Knight, Chancellor and under Treasurer of the Exchequer, and Privy-Counsellor to Queen *Elizabeth*, about the Year of our Lord 1584, on the Ground where the Convent of the Friar Preachers, or Dominicans stood, in *Preachers-Street*.

Suffex Sidney College, was founded in the Year 1598, by the Lady *Frances Sidney* Countess of *Suffex*, by whose Foundation it has a Master, ten Fellowships, and twenty Scholarships; to which Sir *John Hart* added

afterwards two Fellowships and four Scholarships; several other Persons having been since Benefactors to this College.

The Degrees are usually taken at *Cambridge*, as at *Oxford*, except in Law and Physick, whereof, after six Years, they may take the Degree of *Bachelor*, and after five Years more that of *Doctor*.

In this University the *Lent-Term* begins the 13th of *January*, and ends the Friday before *Palm-Sunday*.—*Easter-Term* begins the *Wednesday* after *Easter Week*, and ends the Week before *Whitsun-tide*. *Trinity Term*, they have none at *Cambridge*, for from *Easter* to the Commencement is but one Term with them. *Michaelmas-Term* begins the 10th of *October*, and ends the 16th of *December*.

The first *Tuesday* of *July* is always *Dies Comitiorum*, there called the Commencement, wherein the Masters of Arts, and the Doctors of all Faculties compleat their Degrees respectively; and the *Bachelors of Arts* do theirs in *Lent*, beginning at *Ash-wednesday*.

I will not have the Presumption to give the Precedency to one of those two celebrated Universities over the other, since I know nothing of them but what I have learned from Authors, and common Report; tho' that of *Oxford* has always been reckoned the first; and has always produced, and produces still very eminent Persons in all Faculties; though perhaps that of *Cambridge* is not inferior to it on that Article; and if the Number of eminent Persons is not so great from *Cambridge* as from *Oxford*, it is not for want of Capacity in the Professors; but because *Cambridge* is not so much frequented as *Oxford*, and therefore has not so great a Number of Students. *Oxford* was always certainly, and without the least Partiality, an University of very great Reputation, and even now, that most of the most famous Universities of *Europe* have lost a great deal of their ancient Lustre, that of *Oxford* may be put on a Par with the University of *Paris*; and that of *Cambridge* next.

Besides these two celebrated Universities, there are some very considerable Schools in *England*, viz.

Eaton School, founded by King *Henry VI.* in 1443.

Westminster School, founded by Queen *Elizabeth*.

Winchester School, founded by *William Wickham* Bishop of *Winchester*.

St. Paul's School, in *London*, founded by *John Colles* in 1510.

St. Anthony's School, in *London*, founded by *John Tate*.

Merchant Taylors School, founded by the Merchant Taylors in 1560.

Besides which there is a Free Grammar School in *Shrewsbury* in the County of *Salop*, founded by King *Edward VI.* in the sixth Year of his Reign, and of Christ 1552, and much augmented since by Queen *Elizabeth*, in the thirteenth of her Reign, and of Christ 1571.

From this I'll pass to the Foundations of all the Colleges, privileged Schools, &c. within the City of *London*, beginning by the *Inns of Court*, as they are commonly called, since they are Colleges for the Instruction of young Lawyers in the Practice of their Profession; and as the Temple is the most antient, the first in Order, and accounted the most famous; I'll begin with the Temple.

The TEMPLE, was antiently a House belonging to the Knights Templars of *Jerusalem*, built by them, together with the beautiful Chapel belonging to it, as it now stands, which was dedicated to the Service of God, by *Heraclius* Patriarch of *Jerusalem*, in 1185, and where they continued in great Honour and Opulency for the Space of 100 Years, i. e. to the Time of their Suppression, which happened at the Council of *Vienna*, as mentioned in my Treatise of Orders under the Letter O.

After this Suppression, this House of the Templars was occupied by divers Lords successively. First by *Thomas Plantagenet*, Earl of *Lancaster*, and Cousin of the then reigning King; but being soon afterwards attainted of Treason, he enjoyed it but a short Time.

It fell next to *Hugh Spencer*, Earl of *Gloucester*, who being likewise, soon after, attainted and executed for Treason, it came afterwards in the Possession of *Ando-mar of Valence*, of the illustrious House of *Lusignan* in France,

France, Earl of Pembroke, in England; who having enjoyed it for a while, some Professors of the Law obtained under Edward III. a long Lease of two Parts of the Temple, viz. of the middle and inner Temple from the Knights of St. John of Jerusalem, to whom it had been given in Property, at the Dissolution of the Templars, on Condition of paying to them a yearly Revenue of ten Pounds: Dr. Stapleton, Bishop of Exeter, having got Possession, under Edward II. of what is called at present the outward Temple, and converted it into a House for him, and his Successors Bishops of Exeter, in whose Possession it continued under the Name of Exeter-Inn, until Queen Mary's Time, when the Lord Paget, principal Secretary of State, having found Means to have it conveyed to him and his Heirs, re-edified it; afterwards it came by Purchase under Queen Elizabeth, to Thomas Earl of Norfolk, who passed it over to the Earl of Leicester, and he gave it to his Son, Sir Robert Dudley, of whom the famous Earl of Essex purchased it, for which it was called Essex-House.

The next College or Inn of Court, is Lincoln's-Inn, situated in New-street, or Chancery-lane, part thereof was antiently the Messuage or Mansion-House of a Gentleman called William de Hoverstyle, Treasurer to King Henry III. who was attainted of Treason, and his House and Lands confiscated to the King, who gave his House to Ralph de Nova Villa, Chancellor of England, and Bishop of Chichester, who built on the same Ground a fine House for him, and his Successors Bishops of Chichester, in whose Possession it continued till the Reign of King Henry VII. when it was conveyed to Judge Suliard, which Judge and his Posterity enjoyed it till the Reign of Queen Elizabeth, when Sir Edward Suliard of Essex, sold it to the Benchers of Lincoln's-Inn; and notwithstanding, that Part of the Inheritance of this House belonged first to Hiverkyll, and afterwards to the Bishops of Chichester, yet the Professors and Students of the House called it Lincoln's-Inn, though it never belonged to any of the Earls of Lincoln; not but Sir Henry Lacy, Earl of Lincoln, enjoyed that Part of it which was made out of the old Monastery of the black Friars, given to him by King Edward I. which Friars left that and went into the new Monastery of Black-Friars founded then in London, by Dr. Kilmarby, Archbishop of Canterbury; and it is likely enough that this Earl of Lincoln, got some Part of the Bishops of Chichester's Ground, towards enlarging his new House in Lincoln's Inn, which he built in the Reign of King Edward I. and where he died, in the Year 1310, and not only that House, but likewise Chichester-Inn, and other Messuages purchased by the Benchers of this College, were joined afterwards into one and the same Building, and called Lincoln's-Inn to this Day.

We have no mention made on Record, of the flourishing State of this Inn, until King Henry VIth Reign; when it appears by the Records of the House, that it was then a flourishing, and well established College, provided with famous Professors, and full of Students of the municipal Laws of England.

Since that Time it has been much enlarged and beautified with fair Buildings; for in the Reign of King Henry VIII. Sir Thomas Lovel, who had been Fellow of this House, built the Gate-House, and set up in the Frontispiece, the Arms of the aforesaid Earl of Lincoln, as the Arms of the House with his own Arms; since which Time the Benchers have augmented the House with Buildings and Chambers.

Grays-Inn, was antiently the Inn or House of the antient Barons the Lords Gray, whence it took the Name.

It is situated within the Manor of Pirpool in Holbourn, being an antient Prebend of the Cathedral Church of St. Paul in London; it is at present a very sumptuous Building, with a beautiful Garden, and kept in good Order, where all Persons of Fashion are suffered to walk and take the Air; of this Inn, if I be rightly informed, was the infamous Serjeant Bradshaw, who was President of that sacrilegious, and mock Court, who committed that horrid Crime which irritated Heaven, and shocked the whole Earth; for which the Benchers, and other Gentlemen of that celebrated Inn are not to be reflected upon; since there is not in the whole Kingdom, greater

Friends to Monarchy and more loyal Subjects.

The Exercises practised in these three Inns of Court, whither resort the Sons of the best Gentry in the Kingdom, which is easily known by their good Manners, and noble and gentle Behaviour, are the Study of the municipal Laws of England; in which after they have employed some Years, they obtain the Degree and Title of inner Barristers, and at the End of seven Years, become outward Barristers, and are then called to the Bar, and soon after are allowed to practise openly the Law in all the Courts of Judicature, and to give Counsel, wherefore they are called learned Counsellors at Law: After some Years more, and as they grow in Learning and Reputation, they are allowed to read the Law publicly in their Halls, and therefore are called Readers. If afterwards they read again, they are called double Readers, and lastly, Benchers; being called then to the Government of the Affairs of their Society, to reform the Abuses and Irregularities introduced into it, to punish Offenders, &c.

But many of these Professors are preferred by the King, in Consideration of their great Merit and Reputation, to serve him in higher Offices, in his Court of King's-Bench, Common-Pleas, Exchequer, Chancery, &c. under the Name of Serjeants at Law, and wear a Coif for Marks of their Dignity, and a scarlet Gown on solemn Occasions.

But to enter into a more exact Detail of their Exercises in their Inns; they have Conferences and Disputations, which they call Meotes, Pleadings, putting Cases, &c.

As to the Inns of Chancery, Thavie's-Inn is reckon'd the first as to Antiquity, it was antiently the Mansion-House of an honest Citizen, called John Thavies, an Armourer by Profession; and was rented of him in the Reign of King Edward III. by the chief Professors then of the Law; as it may be seen yet in a Record in the Hustings. But it was purchased afterwards, for the Students and Professors of the Law of Chancery, by the Benchers of Lincoln's-Inn, about the Reign of King Henry VII. retaining still the Name of the old Landlord or Proprietor, Master Thavies.

Furnival's-Inn (as it appears upon Record of the sixth Year of King Richard II.) was the House of Sir William Furnival, Knight, without any other Addition or Title of Honour; but doubtless that Sir William, Owner of this Inn, was Baron and Lord Furnival, whose Heiress was married to John Lord Talbot, created Earl of Shrewsbury, by King Henry VI. and the Earl had this House, and other large Estates in Dowry with his Wife, Daughter and Heiress of the Lord Furnival. George Talbot, Earl of Shrewsbury, sold this House, in the Beginning of Queen Elizabeth's Reign, or thereabouts, to the Benchers of Lincoln's-Inn, for a College for the Gentlemen Students of the Law of Chancery.

Bernard's-Inn, first called Mackworth's-Inn, was, in the Reign of King Henry VI. a Messuage belonging to Dr. John Mackworth, Dean of Lincoln, and being in the Occupation of one Bernard, at the Time of the Conversion thereof, into our Inn of Chancery, it bears the Name of Bernard's-Inn to this Day.

Staple-Inn, or Hôtel of the Merchants of the Staple; which is all I can learn of the Antiquity of this House: To which, however, it must be added, that it is the fairest of all the Inns of Chancery.

Clifford's-Inn, was first the House of Mallon de Hersey, and was resigned to King Edward I. for Debts; and it is commonly said to have been the Palace or House of the Lord Clifford; but in the Records of the Reign of King Edward II. it is said, that this House was given by the King to Robert Clifford, without any Addition of Title; and let afterwards to Students in the Law by Dame Isabel, Widow of the said Robert Clifford, in the eighteenth Year of King Edward II. for four Pounds of annual Rent. Yet the Opinion of those who hold it to have been the House of the antient Lords Cliffords, Earls of Cumberland, is not to be rejected; for the antique Buildings belonging to it, and the antient and honourable Coats of Arms set up in the Hall and other Places of the House, shew it to have been the Mansion of some noble Personage.

Clement's-

Clement's Inn, was a Messuage belonging to the Parish of *Clement's Dane*. I find nothing else in Authors relating to it.

New Inn, was a publick Inn for Travellers, the Sign whereof was the Picture of our Lady, and thereupon it was called our *Lady's Inn*. It was purchased or hired by Sir *John Finure*, Chief Justice of *England*, in the Reign of King *Edward IV.* for 6 *l. per Annum*, for a House for those Students of the Law who were lodged in the *Little Old Bailey*, in a House called *St. George's Inn*, at the upper End of *St. George's Lane*. But some say, the going in was over-against *St. Sepulchre's Church*, and reputed to have been the most antient Inn of Chancery while it stood: But it has been long since converted into Tenements; and I don't know if at present there is any Remains thereof.

Lyon's Inn, was also a publick Inn for Travellers, which had a Lion for the Sign; but purchased afterwards by Gentlemen Professors and Students in the Law, in the Reign of King *Henry VIII.* and converted into an Inn of Chancery.

As to the Rules observed in these Inns of Chancery, and the Exercises practised therein; each Inn has a Chief or Governor, called Principal; and here young Students make their first Essay of the Study of the Law, which if they like and design to proceed, they remove soon after to one of the *Inns of Court*, to which that House of Chancery belongs; for they can take no Degree in an *Inn of Chancery*. Every *Inn of Court* has two or three *Inns of Chancery* belonging to it, viz. to the *Middle Temple* belongs *New Inn*; to the *Inner Temple* belongs *Clifford's Inn*, *Lion's Inn*, and *Clement's Inn*. *Thavie's Inn*, and *Furnival's Inn*, are Members of *Lincoln's Inn*; *Staple's Inn*, and *Bernard's Inn* belonging to *Gray's Inn*. Wherefore several are of Opinion, that all these Houses of Chancery were founded, purchased, and established by the Professors, and Gentlemen of these *Inns of Court*; and to confirm their Opinion, twice every Year, viz. in *Lent* and in *August*, a learned Gentleman is chosen among the Counsellors, to come and hear the *Meotes* and *Disputations*, and give Lessons in each of these Houses of Chancery belonging to that *Inn of Court*, from which this Professor is sent.

There is no Necessity for young Students first educated in one of these inferior Inns, to remove to a superior one; but they may continue in the Inn they have chosen first; but if they remove to another their Admission into it will be attended with more Expences.

The *Six Clerks Office*, is also an Inn of Chancery, where Gentlemen learned in the Law, and belonging to that high Court, live in common, and were in their first Institution Priests; whence they have been called *Clerks*. This Inn is situated in *Chancery-Lane*, and was purchased for them by Mr. *John Kederminster*, Esq; one of their Society, a most skilful Man in his Profession, very faithful to his Friends, and very just to his Clients. This House was antiently the Palace of the Abbot of *Neeton* in *Lincolnshire*; and afterwards the House of one *Hersflete*.

To the said *Six Clerks Office* may be added *Curstors*, or rather *Coristers Inn*, founded by Sir *Nicolas Bacon*, Knight, Lord Keeper of the Great Seal of *England*; and situated in *Chancery-Lane* over-against *Lincoln's Inn*. The Office of the *Curstors* is to make all original Writs which are to be sent into all Parts of *England*.

Some chuse rather to call these Gentlemen *Coristers* than *Curstors*, because, say they, they are neither Messengers nor Postmen; and support their Sentiment on that antiently most of the Officers of Chancery, or Court of Conscience, were Ecclesiasticks, Divines, and Canonists; for Example, the first Officer of this Court was a Bishop, and was called *Cancellarius*, a *Cancellis*, because he set *intra cancellos*, i. e. in Chancels. The second Officer is the *Master of the Rolls*, who was either a Dean or Warden, or Provost of some Cathedral, or Collegiate Church. The Masters of Chancery were Doctors of Divinity, and of the common Law, and had Prebends and Dignities in the Churches aforesaid. The *Six Clerks* were secular Priests, as it appeared by their Habits and shaved Crowns, to be seen yet on their Tombs in the Temple Church, and elsewhere. Whence

it is concluded, that it was proper that among all these Ecclesiasticks, and next to them should be Choristers, because there was then no considerable Church without them.

Next come the *College of Civilians*, called *Doctors Commons*, situated upon *St. Bennet's Hill* near *Paul's Wharf*; which was purchased for them about the Beginning of Queen *Elizabeth's* Reign, by Mr. *Henry Harvey*, Doctor of the Civil and Canon Law, Master of *Trinity Hall* in *Cambridge*, Prebendary of *Ely*, and Dean of the Arches; before which Time the *Civilians* and Canonists were lodged in *Pater-noster-Row*.

Dr. *Harvey* obtained a Lease of this new College of *Civilians* for 100 Years, of the Dean and Chapter of *St. Paul*, for the annual Rent of five Marks; in which are lodged, and live in common, the Judge of the High Court of Admiralty, who is always a Doctor of the Civil Law, and Deputy of the Lord High Admiral of *England*, for Matters of Law and Judicature in maritime Affairs, whether criminal, civil, or capital. Item, the Dean of the Arches: The Commissioners delegate, or Judges of the Court of Delegates: The *Vicar-General*; *Chancellors* of the Archbishop of *Canterbury*, and the Lord Bishop of *London*: The *Master* or *Custos*, or Commissary of the Prerogative Court of *Canterbury*: The *Auditor Causarum*, or Judge of the Court of Audience; and so many of the Judges of the Court of High Commission as are professed *Civilians*: As also the Doctors of Civil and Canon Law, who are Advocates in all these several Courts; together with the *Procurators* or *Proctors* in these Courts, commonly called *Licentiates* and *Bachelors* in the Civil and Canon Law.

Note, That having taken Notice of the *College of Physicians*, in my Treatise of Apothecaries, and of *Physick*; it would be needless to repeat here what I have said in those two Places; therefore I'll pass it over in Silence, to come to *Gresham College*.

Gresham College, in *Bishopsgate-Street*, was founded by Sir *Thomas Gresham*, Knight and Merchant of *London*, in 1579, for seven Lectures of seven different Faculties and Arts, to be read publickly, viz. a Lecture of *Divinity*, a Lecture of the *Civil Law*, a Lecture of *Physick*, a Lecture of *Rhetorick*, one of *Astronomy*, one of *Geometry*, and one of *Musick*; by seven different Professors of those several Arts and Sciences: Those Lectures to be read only in Term-time; each Professor being allowed by the worthy Founder fifty Pounds a Year, with a commodious Lodging in the fine College he caused to be built for that Purpose.

Sion College, situate in the Parish of *St. Alphage* within *Cripplegate*, has been a religious House Time out of Mind, sometimes under the Denomination of a Priory or College; sometimes under that of a Spittle or Hospital, as at its Dissolution 31 *Henry VIII.* it was called *Elfying-Spittle*, from *William Elfying*, Mercer, who founded it Anno 1329, 3 *Edward III.*

'Tis now, and has been 6 *Carol. I.* a Complication of both: 'Tis a College for the Use of all the *London* Ministers, Rectors, Vicars, Lecturers, and Curates, canonically instituted and inducted, or that have Licence to preach within the City of *London*, from the Lord Bishop of that Diocese, who were incorporated by *Charles I.* 1631, under the Name of *President and Fellows of Sion College*, within the City of *London*, at the Prayer of Dr. *Thomas White*, Vicar of *St. Dunstan's* in the West, and one of the Residentiaries of the Cathedral Church of *St. Paul*; 'tis an Hospital likewise for ten poor Men and ten poor Women (the former within, the latter without the Gates of the House) whereof four are to be nominated by the City of *Bristol*, where Doctor *White* was born; eight by the Merchant Taylor's Company, six by the Parish of *St. Dunstan's* in the West, where he was Minister 49 Years, and two by *St. Gregory's* near *St. Paul's*, where he lived about 20 Years, unless any of his poor Kindred appear, who are always first to be considered by the Electors, the President, two Deans, and four Assistants, who are annually chosen out of the Rectors and Vicars of *London*, as Governors of this College and Hospital, subject to the Visitation of the Lord Bishop of *London*.

Mr.

Mr. *John Simpson*, Rector of *St. Olave's* in *Hart-Street*, and one of Dr. *White's* Executors, built here a stately Library for the Clergy principally, without excluding other Students, who have the free Use of it under certain Restrictions, which are printed, and hung up in that fair Room, not inferior to many of the best Libraries in either of the two Universities.

This Library was at first well stocked by the Founder thereof, and many other Benefactors, viz. Sir *Paul Bayning*, Viscount *Sudbury*, his Viscountess, Sir *Paul Pindar* Sir *George Croke*, *Elizabeth* Viscountess *Camden*, *Brion Walton*, Lord Bishop of *Chester*, several Aldermen of *London*, with most of the Clergy thereof. At length it was so augmented by the Books belonging to the Cathedral of *St. Paul*, which were carried first to *Camden-House*, and then brought thither in 1647; that soon after, viz. Anno 1656, the then Library-Keeper, Mr. *Spencer*, publish'd a large Catalogue of them in Quarto.

Merchant-Tailors School, situate near *Cannon-street*, was built by Sir *Thomas White*, Alderman, and Merchant-Taylor of *London*, the Founder of *St. John Baptist College* in *Oxford*. Here are 300 Scholars taught; 100 gratis, 100 at 2s. 6d. a Quarter, and 100 at 5s. a Quarter.

To this School belongs 37 Fellowships in the said College at *Oxford*; two Scholars are from hence yearly elected as Places become vacant. One Side of it stands upon great stone Pillars, in a large Court paved with Free-Stone. It has a good Library belonging to it, and a large House for the Master, with Apartments for each of the three Ushers.

At *Mercers-Chapel*, in *Cheapside*, is a good School belonging to the Company of *Mercers*.

The *Charter-House* was antiently a Monastery of *Carthusian Monks*, whence it is called, by Corruption, the *Charter-House*. It is situated without the Walls of *London*, and is also called *Sutton's-Hospital*; it consists of a Master, a Governor, a Chaplain, and several other Officers; also a Master and Usher to instruct 44 Scholars, besides 80 decayed Gentlemen, Soldiers, and Merchants, (at least it was the Intention of the noble Founder, which is at present much frustrated) who have all a plentiful Maintenance of Diet, Lodging, Cloaths and Physick, &c. and live all in a Collegiate Manner: And the 44 Scholars have not only Necessaries while they are here taught, but if they become fit for the Universities, there is also for each of them, out of the yearly Revenue of this College, 20*l.* a Year, to keep them eight Years at the University; and to others fitter for Trades is allowed a considerable Sum of Money to bind them Apprentices.

There are, besides, all Sorts of Officers necessary for such a Society, as Physician, Apothecary, Steward, Cooks, Butlers, &c. who have all competent Salaries.

This vast Revenue was the sole Gift of *Thomas Sutton*, Esq; a *Lincolnshire* Gentleman. The House cost him at first 13000*l.* and the fitting it up for this Purpose about 7000*l.* more, in all 20,000*l.* and was endowed by him with 4000*l.* per Annum, which has been much improved since. The Founder died the 12th of *December* 1611. His Foundation having been kept entire, and maintained with his own Revenue, without admitting any other Addition of Charity; and is of such Reputation, that the Kings of *England* judged it proper to appoint, by Letters Patent under the great Seal, Persons of the first Rank, and in the most eminent Posts of the Kingdom, to be the Overseers and Governors of this Society. Their Number must be 16, and all the Vacancies supplied by the Election of the remaining Governors.

The Universities of *Scotland* are four, viz. *St. Andrews*, *Glasgow*, *Aberdeen* and *Edinburgh*.

The University of *St. Andrews*, was founded by Bishop *Henry Wardlaw*, in the Year of Christ, 1412, and endowed with very ample Privileges. The Archbishops of *St. Andrews*, were formerly Chancellors of the University; but now it is governed by a Rector, chosen every Year, and has the same Authority as the Vice-Chancellors of *Oxford* and *Cambridge*, and by the Statutes of the University, ought to be one of the Principals of the Colleges. A Professor of Mathematicks was lately added to this University.

It has three Colleges, *St. Salvator's*, *St. Leonard's*, and

St. Mary's College; *St. Salvator's*, commonly called the *Old College*, was founded by *James Kennedy*, Archbishop of *St. Andrews*, who built the Edifice, together with a Church, wherein he has a curious Monument; he furnished it with Ornaments, and endowed it with a sufficient Revenue for the Maintenance of a Provost, Masters and Professors. At the first Foundation, it was endowed with a Doctor, Batchelor and Licentiate in Divinity; four Professors of Philosophy, and eight poor Scholars, called *Bursars*, who are here instructed gratis. Dr. *Skene*, late Principal of this College, repaired and augmented it, and also founded a Library, which is now well furnished with Books.

St. Leonard's-College, was founded by *John Hepburn*, Prior of *St. Andrews*, in 1524, who endowed it with a Maintenance for a Principal or Warden, who is always to be a Doctor of Divinity, four Professors of Philosophy, called *Regents*, and eight poor Scholars. Sir *John Scot*, added a Professor of Philosophy, with a liberal Maintenance, and augmented the Library with several valuable Volumes; which was since increased by the Collection of Books left to it, by Sir *John Wedderburn*.

St. Mary's, a new College, was founded by *James Beaton*, Archbishop of *St. Andrews*, in 1536, and endowed with a Maintenance for two Professors, who are to be Doctors of Divinity, one stiled principal Professor of Theology, the other only Professor of Theology, to these was lately added a Professor of Mathematicks; for the Improvement of which Science, the first Professor Mr. *James Gregory*, procured an Observatory to be erected in the College Garden, furnished with many Mathematical Instruments. — No Philosophy is taught in this College.

The University of *Glasgow*, was erected by a Bull of Pope *Nicholas V.* dated *Septimo Calendas Januarii*, A. D. 1451, at the Desire of King *James II.* of *Scotland*: Dr. *Turnbull*, Bishop of *Glasgow*, supplying the whole Charges of the Foundation. By the Pope's said Bull, he and his Successors in the Bishoprick of *Glasgow*, were constituted Chancellors of the University, with all the same Powers enjoyed by the *Rectores dicti Cancellarii* of the University of *Bononia*. And there were erected, "*Studium generale in Theologia, Jure Canonico & Civili artibus, atque quavis alia licita Facultate.*" And all Powers, Privileges, and Immunities, which had at any Time been granted by the holy See, to the University of *Bononia*, all granted to this University of *Glasgow*.

The said Prelate procured likewise a Charter, under the Great Seal of *Scotland*, of most ample Privileges to this University, from King *James II.* dated at *Sterling*, April, 21, 1453. The Bishop also, with the Consent of the Dean and Chapter, gave the University another Charter of Privileges under their Seal, *December* 1, 1453. all which Charters were confirmed by Charters from succeeding Kings and Archbishops.

The University was at first, composed of the Clergy of the Cathedral, and the neighbouring Countries, among whom were Mr. *Patrick Latt*, then Chancellor of the Diocese, afterwards Chancellor of *Scotland*, and M. *David Cadzow* or *Stago*, Precentor of the Cathedral, who was the first Doctor, and afterwards a great Benefactor to the University. Mr. *William Elphinston*, was first Dean of the Faculty of Arts, then Rector of this University. The Abbot of *Kilwinning*, and some of those of the Abbey of *Melroth*, were Members of this University at its first Foundation. In the Year 1457, is found immatriculated into this University, *Andreas Stuart*, *Subdecanus Glasguensis*, *frater Serenissimi Regis Scotorum*, *Jacobi Secundi*.

There is in the Records of the University, still extant, the original Rector Book in Vellum, containing a regular Journal of all Proceedings in the University's Congregations, from the Foundation, to very near the Time the modern Apostles gained Ground there.

In 1560, when they conquered the whole Kingdom, every body knows in what Manner they seized all the Revenues of the Church, and of religious Houses, and turned out the Catholick Clergy; the Members of this University fled to *France*; wherefore the Buildings were neglected, and great Part of the Salaries of the Masters and Scholars were seized. Queen *Mary*, by her Letters

to the Lords of the Council, dated July 13, 1563, granted again for the Maintenance of Scholars (called *Bursars* here) certain Lands and Annuities, belonging to the Dominican Friars at Glasgow, together with their Houses and Dwelings. Some few Years after, they also obtained a Grant of all the Lands, Houses, Annuities, &c. which had formerly belonged to any Chapel, Altarages, Prebendaries in any Churches or Monasteries found in Glasgow.

King James VI. of Scotland, by his Charter, dated at Dalkeith July, 13, 1577, confirming the former Donations, granted to the College erected in the University, the Tythes of the Parish of Govan, for maintaining the Principal, Regents, Bursars or Scholars and Servants; this Charter was ratified in his next Parliament. Also, the said King, with Advice and Consent of Parliament, dated June 28, 1617, grants to the said College, the whole Tythes of the Parishes of Renfrew and Kilbride, reserving Stipends to the Ministers.

By several other generous Donations, the Funds of this College were augmented: The Reverend Mr. Zacharias Boyle, gave above 1600 l. Sterling before the Civil Wars; by which, and some other Funds, were purchased the Tythes of three other Parishes. William, Earl of Dondenal, gave about 60 l. Sterling per Annum, for the Maintenance of Bursars in Philosophy and Theology. Anne, Dutches of Hamilton, gave 1000 l. Sterling, for the Maintenance of three Students in Theology; this Fund is now augmented, by careful Management, to near 1500 l. Capital.

The late King William, gave to the College a Grant of 300 l. Sterling, per Annum, out of the Rents of the Archbishoprick, for several Purposes about the College, and among others, 70 l. Sterling per Annum, to maintain four Students in Theology. The late Queen Anne, upon Representation made to her, that the Scotch Parliament, before the Union, had resolved to give some Augmentation to the Scotch Universities and Colleges, gave a Grant of 210 l. per Annum, to each of them during her Life. This has been continued by King George I. and his present Majesty. — That good Prince King George I. gave also a very handsome Fund for a Professorship of Ecclesiastical History.

Before the Revolution, Mr. John Snell, devised to Baliol College in Oxford, certain Lands for the Maintenance of Scotch Students: These Lands now maintain four Scholars at 40 l. per Annum, each for eleven Years: And upon the Death of his Daughter, two other Scholarships will be added. These Scholars are limited to be of Scotch Parents born in Scotland, and to have studied two Years in Glasgow; reserving to this College the Right of nominating them to the Masters and Fellows of Baliol.

The late Dr. Daniel William devised, for the Maintenance of Students in Theology, certain Lands to this College, the Value of which is not yet fully ascertained.

His Grace the late Duke of Chandos, gave 500 l. Sterling to this University, which is employed towards building a Library, which is a very beautiful Superstructure.

John Arr, of Barrowfield, Esq; Rector of this University, gave 500 l. Sterling for a Fund; the Interest of which is yearly to be added to the former Fund for buying Books. The late Mr. John Sterling, Principal thereof, left 165 l. Sterling to the same Purpose.

The University Officers are the Chancellor, who is elected for Life, and whose Power is chiefly in conferring Academical Honours.

The Rector, who is elected annually in Comitiiis, where all the matriculated Members have Votes, has near the same Power as the Vice-Chancellor of Oxford, being the chief Magistrate in the University.

The Dean of the Faculty, who is elected annually by the University Meeting, or the Senatus Academicus, composed of the Rector, and of all the Regents and Professors. His Business is to preside in all Affairs of Literature and publick Examinations. The Chancellor has also the Power to nominate a Vice-Chancellor to act in his Absence.

The Professors are thirteen, and, by a late Statute, take Place according to the Seniority of their Admission, except the Principal, and the second Professor of Theology,

who are always ranked first.

There are besides, upon the Foundation, and upon Funds since added, a Library-Keeper, a Bdeillus, about 30 Bursaries of one Sort or other, and a Janitor, besides inferior Servants.

In this University, there is only one College, the Professors are all elected by the Faculty, or Senatus Academicus, except the Principal, and those of ecclesiastical History and Anatomy.

The Buildings of this College are much better than those of any College in Scotland; they consist of three Squares, two old ones, and one lately built, but not yet finished; the old Buildings in Queen Mary's, or King James's VI. Days, have probably been separated from the Town by a high Wall, but now, the College fronts the principal old Street of Glasgow; the old Front to the Street, which is a very stately Edifice, three Stories high, and about 130 Feet in length, was built in the Year 1653. together with the outer Square of the Court; but the inner Sides of the other Court are much older; the latest built Part of these three Sides, is above a hundred Years old, of hewn Stone, all three Stories high, and more decent than most Buildings of that Time, the outer Court, is about 85 Feet in Breadth, in the Area within the Buildings; to the Front is added streetwards on the South side, the Principal's House large and convenient; to the North Side is built the new Court, not yet finished; in which are at present six very large and convenient Houses, for the Professors: The Area of this Court, within the Buildings, is about 65 Feet in breadth, and about 180 in depth, retiring further back from the Street, than the Depth of both the old Courts, there is lately built, but not quite finished, the Duke of Chandos's Library, on the South Side Corner of the old Square, quite separated from the older Buildings, and fronting to the Gardens; it is 60 Feet long, 38 wide, and 33 Feet high to the Cornice; the old Fabrick of the three Courts stands upon an Area of 270 Feet, towards the Street, and as much in Depth; behind the Buildings is a spacious Garden of near nine English Acres, inclosed with a Wall of hewn Stone, about eight Foot high, and laid out into beautiful Walkes, adorned with Hedges; adjacent to this is a Physick Garden: In the Buildings are nine large Houses for the Professors; a University-Hall, very spacious and well finish'd; a common Hall, two Libraries, and six convenient Schools or Churches for teaching, with about 40 large Chambers for Lodgings for the Students, a Printing-House, and a public Kitchen; the Tower, or Steeple standing between the two old Courts, is tolerably stately, being about 80 Feet high, of Stone-work, besides the Spire.

The Library consists of about 9000 Volumes.

In this College there is a curious Collection of Stones with Roman Inscriptions, found in the Roman Wall near Glasgow, most of which are printed in some late Collections of the British Antiquities.

The Scholars in Glasgow all wear red Gowns while they are under-Graduates; and the Professors wear black Gowns, like those of Doctors of Civil Law.

The University and King's College of Aberdeen was founded in 1494, at which Time James IV. King of Scotland, procured from Pope Alexander VI. a Bull, dated 4 id. Febr. of the aforesaid Year, erecting in the City of Old Aberdeen, an University (Universitas Studii generalis) wherein Theology, the canon and civil Laws, Medicine, Philosophy, and all other liberal Arts and Sciences should be publicly taught and professed; allowing both Professors and Students in ample Form, all the Privileges, Liberties, Immunities, and Exemptions, enjoyed by any University whatsoever, particularly the Universities of Paris and Bologna; all which Privileges the King himself confirmed by his Royal Authority, allowing the University all the Powers and Liberties which the most Christian Kings of France had conferred on the University of Paris, or his Royal Progenitors, King James I. and II. on the Universities of St. Andrews and Glasgow.

The celebrated Bishop Elphinston, established Doctors and Professors in the several Faculties, Masters and Students, to the Number at first of 36, which he afterwards augmented to 42. These Persons founded more, 1. Four Doctors, the First, Doctor of Theology, who is Principal

Principal of the whole College: The *Second*, Doctor of *Common Law*: The *Third*, of *Civil Law*: And the *Fourth*, of *Medicine*. 2. Eight *Masters of Arts*; of which *First*, was the *Sub-Principal*; the *Second*, Professor of *Humanity*; the other six Students of *Theology*; out of which are chosen the Regents, who, together with the *Sub-Principal*, were to teach *Philosophy* and the *Arts*. 3. Three *Bachelors*, Students of the *Laws*, two of the *Civil Law*, and one of the *Canon*. 4. Thirteen Students of *Philosophy* and *Arts*. 5. Eight *Prebendary Priests*, (*Sacerdotes Prebendarii*) the first whereof was *Cantor*, the second *Sacrist*, the other six were called *Capellani Chori*, one of which was *Organist*. 6. Six Singing Boys (*sex Pueri Choreales*) who were to assist with the aforesaid Priests at all Hours of Divine Service, in the Chapel of the College.

For the Accommodation of all those founded Members, the said Bishop *Elphinston*, mostly at his own Charge, built a stately College, consisting of an entire Court, a handsome College richly furnished, a lofty Steeple, with a noble *Cupola* in Form of an imperial Crown, supported with arched Pillars, rising cross ways from the Battlement, and a Set of fine large Bells; of large publick Halls and convenient Apartments for the Principal, Sub-Principal, Regents, Students of *Theology* and *Philosophy*, to whom alone he assigned Lodgings within the Gates of the said College. For the other Masters, *viz.* the Canonist, Civilian, Physician, and Grammarian, with their Students, he caused to be built, without the College, but within the Precinct of the *University*, separate Chancels, with Gardens, and other Conveniences, where the said Professors were to have their Lessons, and live in Commonalty with their Students. He likewise appointed Chambers for the eight *Prebendary Chaplains*, and six Singing-Boys, without the College: Assigning to each of those founded Members, out of the Revenues given, or procured by the King, and himself, several distinct Salaries, sufficient, at that Time, considering the Value of Money then, but now small and inconsiderable.

His Majesty's *Mareschal-College* in *Aberdeen* was founded the 2d of *April* 1593, by *George Earl Mareschal*, which Foundation was confirmed by the King and Parliament, the 2d of *July* of the same Year; as likewise by King *Charles II.* and his Parliament, in 1661: So that it is a distinct University from the other College, in the neighbouring Village, commonly called the *King's College*, or old College of *Aberdeen*.

Both Colleges were united, and called the *Caroline University* by King *Charles I.* who in the last Parliament held by him, in *Scotland*, declared them one *University*, under that Name, and bestowed on them the Revenues of the Bishoprick of *Aberdeen*; but all this was reversed at the Restauration of King *Charles II.*

At first the *Mareschal College* consisted of a Chancellor, Rector, Dean of Faculty, four Assessors to the Rector, the Principal, and three Regents, to teach the Languages and Philosophy, six Bursars, an Oeconomus, a Butler, and a Cook. The Chancellor, Rector, Dean of Faculty, and Assessors are annual Magistrates of the *University*, chosen by the Students with the Concurrence of the Principal, and other Masters. The Dean of Faculty is only chosen by the Rector, Principal, Masters, and Minister of *Aberdeen*, called Parson of *St. Nicholas*. The Election of these Magistrates is made every Year on the 1st of *March*.

Besides these Members, the College now consists of a Principal, a Professor of Divinity, a Professor of Medicine, Mathematicks, three Professors of Philosophy, one of Greek, and one of Oriental Languages, which Professor was lately founded by Mr. *Gilbert Ramsay*, Minister of the Gospel in *Barbadoes*; who provided likewise, 15 *l.* per Annum, for each of four Bursars, in Philosophy; and 25 *l.* per Annum, for each of two Bursars, in Theology, in the said *University*; a Library-Keeper, a Porter, and a Servant under him.

There are a great many more Bursars in his Majesty's *Mareschal College*; the most considerable were founded by *Irwine of Drum*, Esq; *Turnerhall*, and the late Bishop of *Sarum*, Dr. *Gilbert Burnet*, and Mr. *Lorimer*.

The Earl *Mareschal*, Founder of the said College, bestowed for the Maintainance of the Principal, three

Regents, &c. several Lands, with the *Grey-Friars Convent*, &c. which had been given to him by the Provost, Bailiffs, Council, and Community of *Aberdeen*, to be annexed to the College, as the Acts of Parliament abovementioned, more fully bear, but the Earl *Mareschal's* Donation out of his own Lands, for six Bursars did not take place.

The principal Professors of Medicine, Philosophy, and Greek, are now presented to their respective Offices by his Majesty, since the Forfeiture of the Earl *Mareschal*.

The Magistrates and Town-Councils, as Patrons, present the Professor of Divinity; which Office was first founded by one Mr. *Pat. Copland*.

The Library of this College, as well as a Salary for the Keeper thereof, was first founded Mr. *Thomas Reid*, Secretary to King *James VI.* for the *Latin Tongue*.

The Principal and Professors wear black Cloth Gowns: The Students red ones.

The *University of Edinburgh*, was founded by *James VI.* in 1582; which Erection was afterwards confirmed by several Acts of Parliament, and last of all by the Union Act, in 1706.—The royal Founder endowed his own *University* with as ample Privileges as enjoyed by any other in his Dominions. The Magistrates and Town-Council of *Edinburgh* are perpetual Curators, and the Lord Provost of the City is Chancellor of the *University*.

At its first Institution, the *University* consisted of a Principal, who was also Professor of Divinity; and four Professors of Philosophy, to whom, soon after, was added a Professor of Humanity and Rhetorick; and these five were commonly called Regents.

As the Reputation of the *University*, and Number of Students increased, several new Professorships were instituted and endowed, partly by the royal Bounty, and partly by the Curators of the *University*, assisted therein by the large Donations and Liberalities of many of the Nobility, Gentry, Clergy, and Citizens, who either had their Education in the *University*, or were zealous to promote Learning. Out of these Benefactions were allotted Funds for many Scholarships or Bursaries; and a publick Library was founded, and by Degrees well furnished with useful and curious Books.

The Principal is always first Professor of Divinity, by his Office, he presides in the Meetings of the Faculties; confers all Degrees, in the Presence, and by the Appointment of the Faculties, appoints the publick Exercises, visits the Classes, and takes an Account of the Behaviour of the Students.

The Professors of Divinity, Ecclesiastick History, and oriental Languages, are obliged by the Constitution, to teach publickly in the *University*, and to instruct all Students who attend their Schools in their several Professions, without any *Premium*.

The ordinary Professor of Divinity attends in the publick Schools five Days of the Week, reads Lectures of Divinity, explains some System (says my Author, for I did not know before that there were Systems in Theology) appoints Exercises for the Students, proposes Questions, and solves Difficulties.

The Regius Professor of Divinity, has for his particular Province Church History, on which he has publick Discourses during the Session.

The Professor of oriental Languages, teaches the Students of Divinity the *Hebrew*, *Syriack*, &c.

Of the five Regents, there are three Professors of Philosophy, a Professor of Greek, and a Professor of Humanity.

The Humanity is the first or lowest Class, in which one of the best *Roman* Authors are explained and illustrated, and the Youth exercised in writing *Latin* and *English*.

In the Bajan or Greek Class, the Youths are taught the Principles of that Language, and brought to explain Greek Authors, and to translate *Latin* into Greek. Such as have already some Knowledge of the Language are attended by the Professor at other Hours, and assisted in reading the best Greek Orators, Historians, Poets, Philosophers, and Physicians.

The Course of Philosophy is divided among the three Professors, each minding that Branch to which he has been named, while the Students every Year rise from one Professor and School to another.

The

The Professor of Mathematicks usually teaches three Clisses, and sometimes four, according to the Number of Years his Scholars apply themselves to that Study. Besides that one or two of these Clisses are sometimes sub-divided by reason of the Number of Scholars or other Circumstances.

There are three Professors of Law in this *University*, one of the Law of Nature and Nations; one of the Civil and Canon Law; the third of the municipal or common Law. The first of these Professors was established, and liberally endowed by the late Queen *Anne*, and is in the Gift of the Crown; the other two, as also a Professor of Universal History, and *Roman* Antiquities, was settled and endowed by Act of Parliament, by which it is appointed, that upon a Vacancy in any of these Employments, the Faculty of Advocates shall nominate two Persons whom they judge qualified for the Office, and the Town-Council of *Edinburgh* is to chuse one of these for the Professorship. These Professors regularly begin their private Lessons about the Beginning of *November*.

There is a Professor of Anatomy, and four Professors of Physick in the *University*, who concert together the most proper Order and Method to teach Medicine, and teach every Year a compleat Course of it in all its Branches, beginning about the Middle of *October*.

During the Session, or Term-time, the Principal has some *Latin* Discourses in the common Hall, where all the Professors and Students are convened: Afterwards

the Professors, in their Turn, harangue in publick every *Wednesday* till *May*; when the publick Examinations and Disputations begin.

Towards the End of the Sessions is the usual Time to take Degrees in Arts: Upon Application, the principal Summons a Meeting of the Faculties, to whom the Promoter reports the Names and Standing of the Candidates: Examiners are appointed to make Trial of their Qualifications, and to report at the next Meeting. If the Candidates are approved they have it in their Option, to be admitted in a publick and solemn Manner, or in a private one: If they chuse the first, some one or more of the Candidates must publish a Dissertation or Thesis on some Subject of Philosophy. Upon the Day appointed, all the Professors and Students are convened in the common Hall, and the Magistrates of the City and Persons of Note and Learning, are invited to be present. Some of the Candidates, or others present, are at Liberty to propose Objections against the Thesis, which are answered by one of the Defendants: The Promoter moderates in the Dispute, and determines upon Questions. After this, the Opinion of the Professors being asked, the Principal proceeds to the Solemnity of admitting the Candidates to the Degree of *Master of Arts*. But this publick Solemnity is of late rarely chosen. So if the Examinators find the Candidates qualified, the Faculty acquiesce in their Report, and the Principal confers the Degree in their Presence.

WEAVING.

WEAIVING, is the Art or Act of working a Web of Cloth, Silk, Linen, or other Stuff, on a Loom with a Shuttle.

I'll explain all these different Manners of *Weaving*, each in Order, beginning by that of weaving of Cloth, which though not the most curious of them all, deserves notwithstanding, the first Rank, as being the best and richest Manufacture in *England*.

Cloth, as understood here, is a Web, or a Tissue of woollen Threads, interwoven; whereof some called the *Warp* are extended lengthways, from one End of the Piece to the other; the rest called the *Woof*, disposed a-cross the first, a Breadthways of the Piece. *Cloths* are woven on the Loom, as well as Linens, Druggets, Serges, Camblets, &c. they are of various Qualities, fine, coarse, strong, &c. Some are made of Wool, and these of different Colours; the Wools being dyed, and dress'd, are first spun, then wove; others are work'd White, designed to be died in Scarlet, Black, Blue, Green, Yellow, &c.

To manufacture Cloth for dying, the best Wools for the Purpose, are those of *England* and *Spain*, especially those of *Lincolnshire* and *Segovia*. — To use them to the best Advantage; when taken out of the Bales, they must be scoured by putting them into a Liquor somewhat more than lukewarm, composed of three Parts of fair Water and one of Urine; after the Wool has continued long enough in the Liquor to dissolve and loosen the Grease, it is taken out, drained, and washed in running Water; it is known to be well scoured, when it feels dry to the Touch, and has no Smell, but the natural Smell of the Sheep: In this State it is hung out to dry in the Shade; the Heat of the Sun being apt to make it harsh, and untractable: When dry it is beat with Rods on Hurdles of Wood, or on Ropes, to clear out the Dust, and grosser Filth; the more it is thus beat, and cleared, the more soft it becomes, and the better it spins. — After beating it is well picked, to clear the rest of the Filth, that had escaped the Rods.

It is now in a State to be oiled, whereof one fourth of the Weight of the Wool is required, for Wool designed for the *Woof*; and one Eighth for that of the *Warp*. — The Wool thus oiled, is to be *carded*; which Operation is performed by Means of two Instruments called *Cards*, all which has a double Row, of long Points, or Teeth, ranged against one another, and fastened in a wooden Handle, taking up the whole Breadth of the Handle a Top, but narrower at the End. These two

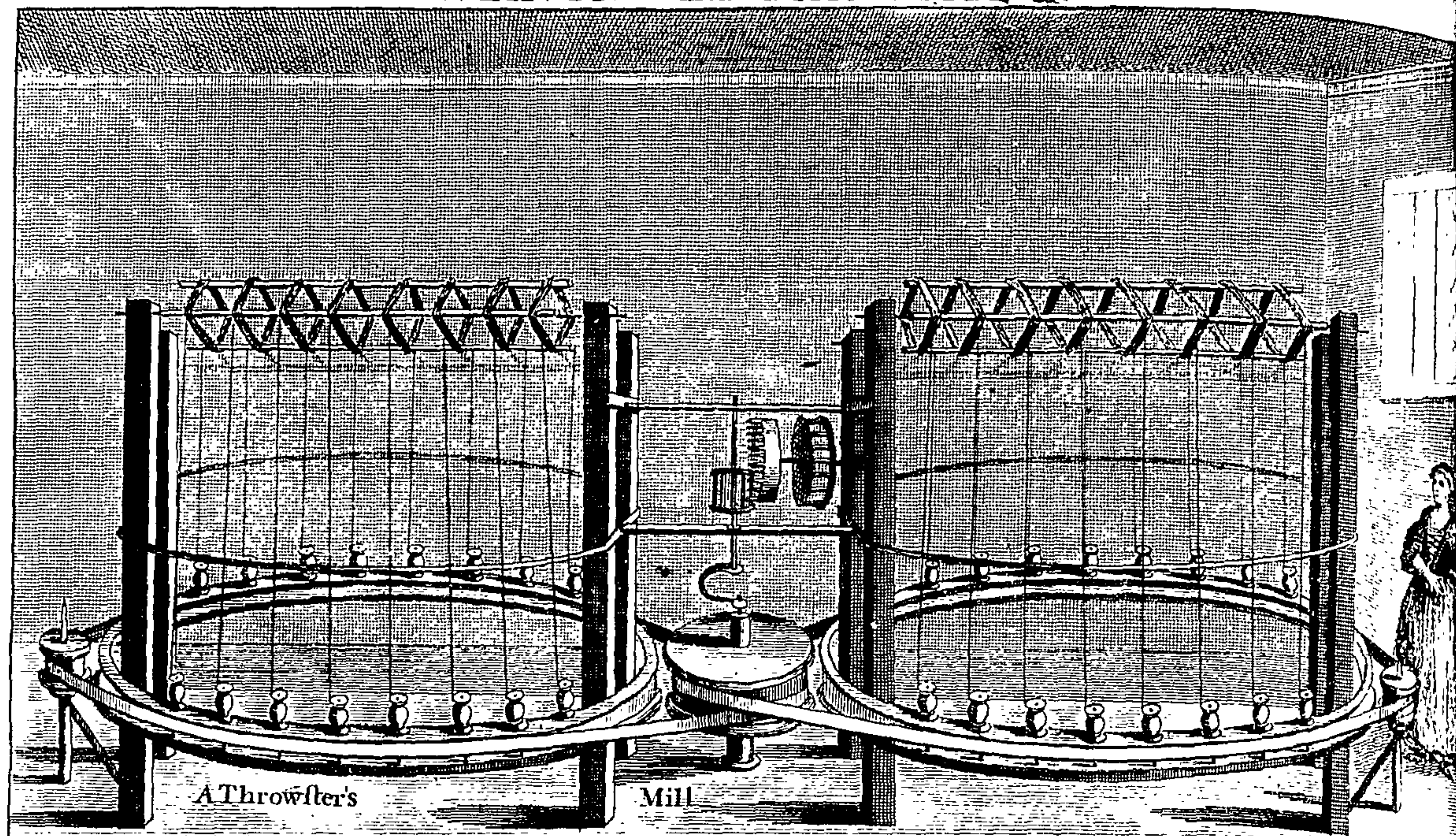
Cards they put to heat, *i. e.* the Extremity thereof, in a Furnace made for the Purpose; on the fore Part thereof, is a Slit, nearer the Bottom than the Top, through which the Extremity of the Card is introduced, the other Part thereof being supported by Stones, or something else, placed underneath; when the Cards are hot enough, the Carder takes out one of them, seats himself on a Chair, or Bench, and laying the Head of the Card on his Knees, the Extremity thereof upwards, holding the Handle with his left Hand, he takes with the Right a handful of the Wool, placed near him, and lays that Wool on his Card, by striking the Card with it, which lays hold of the Wool; and thus continue taking Wool, and striking in on the Card, 'till it very near reaches the End which has been heated. This done, he puts again the Extremity of the Card, thus filled, to heat, and takes out another Card, which he fills in the same Manner; which done, he takes the first filled from off the Fire, fastens it to a Hook made for the Purpose, one Part thereof enters the Handle of the Card, and the other, lays hold of that Part, where the Spindles are fastened; then draws off the Wool.

The Wool thus carded, is spun on the Wheel; observing to make the Thread of the Warps finaller by one third than that of the Woof, and much closer twilled; in order to this, the latter must be spun with the Band or String open, and the former with it crossed.

The Thread thus spun, reel'd, and made into Skains; that designed for the Woof is wound on *Spools*, *i. e.* on little Tubes, or Pieces of Paper, or Rushes, so disposed as that they may be easily put in the Eye of the Shuttle. — That for the Warp is wound on a Kind of Rochets, or large wooden Bobbins, to dispose it for warping. When warped, it is stiffened with Size, whereof that made of Shreds of Parchment is the best; and when dry, it is given to the Weavers, who mount it on the Loom.

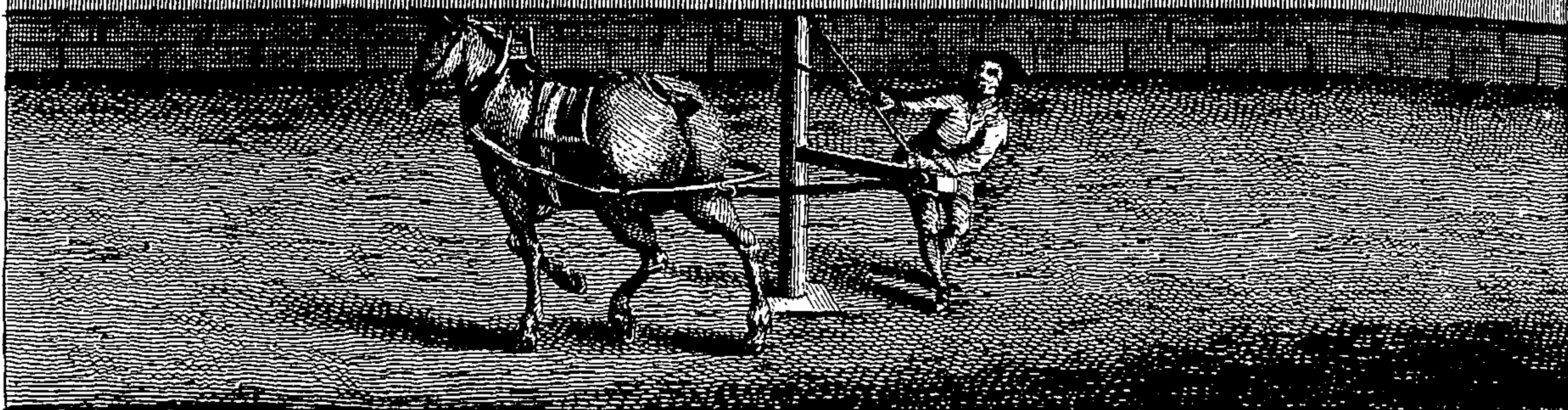
The Warp being on the Loom, the Weavers, who are two to each Loom, one on each Side, tread at the same Time alternately, on the same Threads, *i. e.* now on the right Step, and now on the Left, which raises and lowers the Threads of the Warp equally, between which they throw, transversly the Shuttle, one to the other; and each Time that the Shuttle is thrown, and so a Thread of the Woof inserted within the Warps, they strike it conjointly with the same Thread, wherein is fastened the Comb, or Reed, between whose Teeth the Threads of the Warp are passed; repeating the Stroke as

WEAVING and THROWSTING.

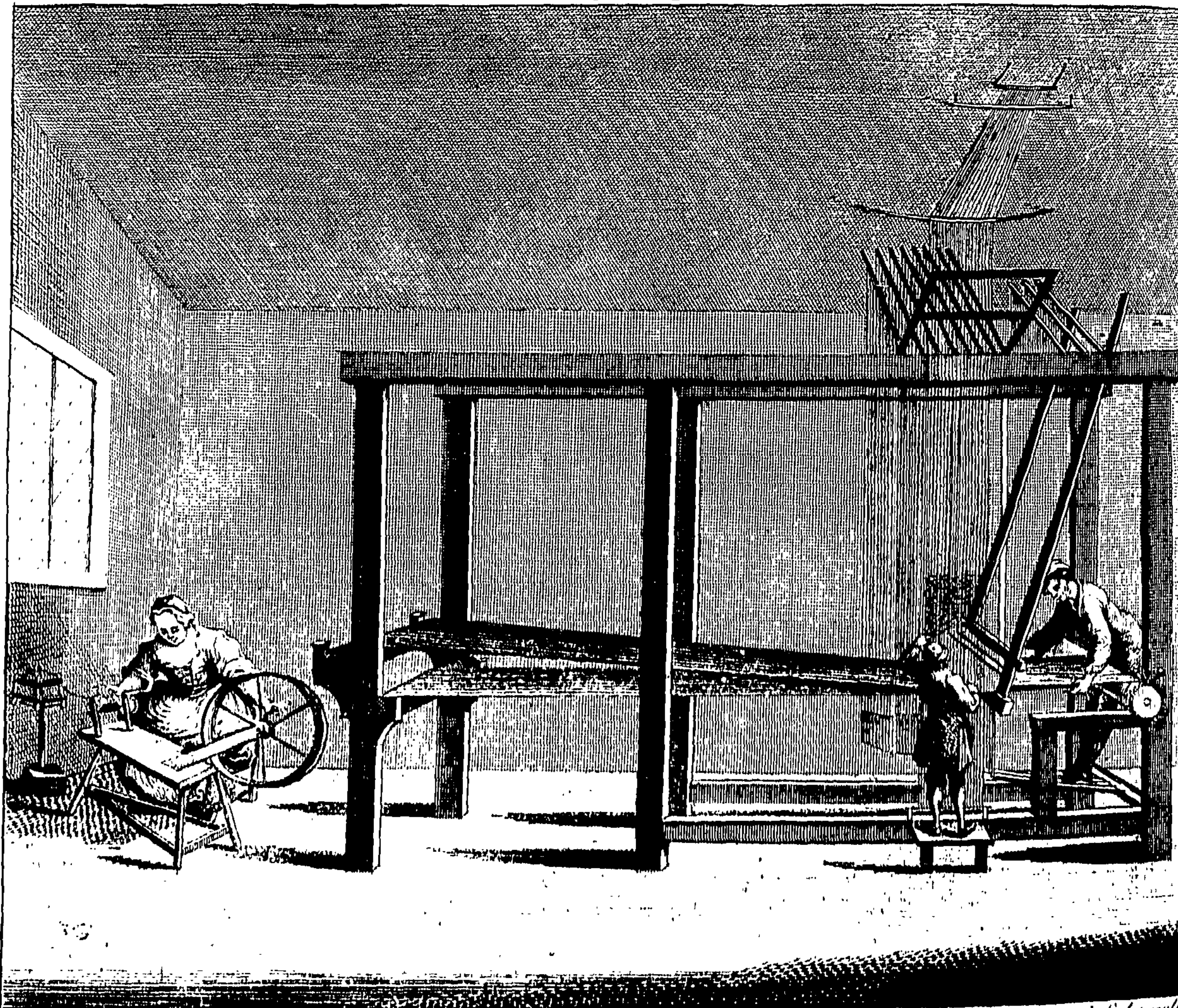


A Throwster's

Mill



A LOOM.



as often as is necessary; in some Cloths, no less than twelve or thirteen Times, *viz.* Six with the Warp open and seven shut.

It may be observed, that the more the Threads of the Woof are struck against each other, the closer the Cloth is; hence it becomes enabled to sustain the Violence of the Fulling-Mill, as well as of the Teazle, or Fulling-Thistle, without fretting or opening.

The Weavers having continued their Work till the whole Warp is filled with Woof, the *Cloth* is finished; it is taken off the Loom, by unrolling it from the Beam whereon it had been rolled, in Proportion as it was wove; and now given to be cleared of the Knots, Ends of Thread, Straws, and other Filth; which is done with little Iron Nippers.

In this Condition it is carried to the Fullery, to be scoured with Urine, or a Kind of Potter's Clay, well cleaned and steeped in Water, put along with the *Cloth* in the Trough, wherein it is fullled.

The *Cloth* being again cleared from the Earth, or Urine, by washing it in Water, is returned to the former Hands, to have the lesser Filth, small Straws, and almost imperceptible Knots taken off as before; then it is returned to the Fuller, to be beat and fullled with hot Water, wherein five or six Pound of Soap have been dissolved. The Soaps most esteemed for this Operation is the White, especially that of *Genoa*. After fulling an Hour and a Half, it is taken out to be smoothed, *i. e.* to be pulled by the Lifts lengthways, to take out the Wrinkles and Cracks occasioned by the Force of the Mallets, or Pestles falling on the Cloth when in the Troughs.

The smoothing is repeated every two Hours, till the Fulling be finished, and the *Cloth* brought to its proper breadth; after which it is washed in clear Water, to purge it of the Soap, and given all wet, to the Carders, to raise the Hair or Nap, on the right Side, with the Thistle, or Wad, wherewith they give it two Rubs or Courses, the first against the Grain, the second with the Grain.

The *Cloth* being dried, after this Preparation, the Cloth-worker takes it, and gives it its first Cut, or Sheering. — This done the Carders resume it, and after wetting it, give it as many more Rubs or Courses with the Teazle, as the Quality of the Stuff requires; always observing to begin against the Hair, and to end with it; and to begin with a smoother Thistle, proceeding still to a sharper, and sharper, as far as the sixth Degree.

After this, the *Cloth* being dried, is returned to the Cloth-worker, who sheers it a second Time, and returns it to the Carder; who, wetting it, gives it as many Courses as he thinks fit, dries it, and gives it back again to the Cloth-worker, who after sheering it the third and last Time, returns it to the Carders, who repeat their Operation as before, 'till the Hair or Nap be well ranged on the Surface of the *Cloth*, from one End of the Piece to the other.

It must be observed, that it is indispensably necessary the *Cloth* be wet, while in the Carder's Hands; in Order to which it is sprinkled from Time to Time with Water.

The Nap finished, and the *Cloth* dried, the Cloth-worker gives it as many Cuts as he thinks requisite for the Perfection of the Stuff. It must also be observed, that all the Sheerings must be on the right Side, except the two last, which must be on the other, and that the *Cloth* cannot be too dry for Sheering.

The *Cloth*, thus wove, scow'd, napp'd, and shorne, is sent to the Dyer. When dyed it is washed in fair Water, and the Cloth-worker takes it again, wet as it is, lays the Hair or Nap with a Brush on a Table, and hangs it on the Tenters; where it is stretched both in Length and Breadth, enough to smooth it, set it square, and bring it to its proper Dimensions, without straining it too much; observing to brush it a-fresh, the Way of the Hair, while yet a little moist on the Tenter.

When quite dry, the *Cloth* is taken off from the Tenter, and brushed again on a Table, to finish the laying of the Nap; It is then folded, and laid cold under a Press, to make it perfectly smooth and even, and to give it a little Gloss. The Gloss is given by laying a Leaf of Vellum or Cap-paper in each Plait of the Piece; and over the whole a square Plank of Wood: On which, by

Means of a Lever, the Screw of a Press is brought down with the Degree of Force judged necessary, with Regard to the Quality of the *Cloth*. In *France* none but scarlet, green, blue, &c. receive this last Preparation; blacks being judged better without it.

Lastly, The *Cloth* being taken out of the Press, and the Papers removed, it is in a Condition for Sale or Use.

As to the Manufacture of *mixt* CLOTHS, or those wherein the Wools are first dy'd, then mixed, spun and wove of the Colours intended; the Process, except in what relates to the Colour, is mostly the same with that just spoke of.

The Method of adjusting the Mixture, is first by making a Felt or Flock of the Colours of the intended *Cloth*, as a Specimen: The Wool of each Colour is weighed; and when the Specimen is to the Manufacturer's Mind, he mixes, for Use, a Quantity in the same Proportion, estimating each Grain of the Specimen at 20 Pounds weight of the same Wool in the *Cloth* to be made.

Thus, if he would mix three Colours, *v. gr.* Coffee-Colour, Feuille-mort, and pale Blue, the first to be the prevailing Colour; he weighs a Quantity of each: For Instance, 70 Grains of the first, 25 of the second, and 20 of the third, then multiply each by 20 Pounds of Wool, and thus gains 1400 Pounds for the Coffee-wool, 500 Pounds for the Feuille-mort, and 400 Pounds for the pale Blue.

The Wools of the Specimen thus weighed, are mixed, oiled, carded, moistened with clear Water, rubbed with black Soap, and in this State wrought a long Time in the Hands, 'till they be reduced into a Piece of Felt, like that used by Hatters.

It is then rinsed in Water, to purge out the Oil and Soap; and when dry, the Hair or Nap is carded out with the Teazle; then shorn once again, 'till the Ground appear, and the several Colours be discernable.

Lastly, Wetting it a little, and pressing it, he examines it well, and if he be not contented with it, makes another Felt; if he be, he proceeds to mix Wools; when mixed it is beat on Hurdles, cleaned, oiled, carded, spun, wove, &c. as in white *Cloth*.

The Goodness of *Cloth* consists, 1. In the Wool being fine and well dressed. 2. In its being spun equally; always observing, however, that the Thread of the Warp be finer, and better twisted than that of the Woof. 3. In the *Cloth* being well wrought and beaten on the Loom, so as to be every where close and compact. 4. In the Wool's not being finer and better at one End of the Piece than in the Rest. 5. In the Lifts being sufficiently strong, and of the same Length with the Stuff; and that they consist of good Matter, as Wool, Hair, or Ostrich Feathers, or the Hair of *Danish* Dogs, which last is the best. 6. In the *Cloth* being well cleared of Knots and other Imperfections. 7. In its being first well scour'd with good Fuller's Earth, then fullled with the best white Soap, and washed out in clear Water. 8. In the Hair or Nap being well drawn out with the Teazle or Thistle on the Pole, without being too much opened. 9. In its not being stretched or pulled farther than is necessary to set it square, and bring it to its just Length and Breadth. 10. In its being only pressed cold.

The *English Cloth* is preferred throughout all *Europe*, especially the best Sorts to all others: Though the Manufacture of *Vanrobes* at *Abbeville*, in *Picardy*, is arrived to a great Degree of Perfection; but the *French* black *Cloth* is preferred to all others for the Beauty of the Colour.

From *Cloth* I'll pass to CAMBLET, which is a Stuff, sometimes of Wool, sometimes Silk, and sometimes Hair, especially that of Goats with Wool or Silk: In others the Warp is Silk and Wool twisted together, and the Woof Hair. *France*, *England*, *Flanders* and *Holland* are the chief Places of this Manufacture; *Brussels* exceeds them all in the Beauty and Quality of its *Camblets*.

There are different Sorts of *Camblets*, *viz.* figur'd *Camblets*, *Water-Camblets* and *wove Camblets*.

Figured CAMBLETS are those of one Colour, whereon are stamped various Figures, Flowers, Foliages, &c. by means of hot Irons, which are a Kind of Moulds, pressed together with the Stuff under a Press. These are chiefly

chiefly brought from *Amiens* and *Flanders*; the Commerce of these was antiently much more considerable than at present.

Water CAMBLETS are those which, after woven, receive a certain Preparation with Water, and are afterwards pressed under a hot Press, which gives them a Smoothness and Lustre.

Waved CAMBLETS, are those whereon Waves are impressed, as on *Tabbies*; by means of a Calender, under which they are passed and repassed several Times.

The Manufacturers, &c. of *Camblets*, are to take Care they do not acquire any false and needless Plaits; it being almost impossible to get them out again.

From this I'll pass to *DRUGGETS*, which is a Sort of Stuff, very thin and narrow, usually all Wool, and sometimes half Wool and half Silk; having sometimes the *Whale*, but more usually without; and woven on a worsted Chain. Those without the *Whale* are wove on a Loom with two Treddles, after the same Manner as *Linnen*, *Cambler*, &c.—Mr. *Savary* invented a kind of Gold and Silver *Druggets*; the Warp being partly Gold and Silver Thread, and the Woof *Linnen*.

Next comes *SERGE*, which is a woollen quilted Stuff, manufactured on a Loom with four Treddles, after the Manner of *Rateens*, and other Stuffs that have *Whale*.

In regard to the Manufacture of the *London Serges*.—For Wool, the longest is chosen for the Warp, and the shortest for the Woof. Ere either Kind is used, it is first scoured, by putting it in a Copper of Liquor, somewhat more than luke-warm, composed of three Quarts of fair Water, and one of Urine. After having staid therein long enough to dissolve, and take off the Grease, &c. it is stirred briskly with a wooden Peel; taken out of the Liquor, drained and washed in a running Water; dried in the Shade, beaten with Sticks on a wooden Rack, to drive out the coarser Dust and Filth; and then picked clean with the Hand. Thus far prepared, it is greased with Oil of Olives, and the longest Part destined for the Warp, combed in the Manner mentioned under the Article Cloth.—To clear off the Oil again the Wool is put in a Liquor composed of hot Water, with Soap melted therein: Whence being taken out, wrung, and dried, it is spun on the Wheel.

As to the shortest Wool intended for the Woof, it is only carded on the Knee with small fine Cards, then spun on the Wheel, without being scoured of its Oil.

The Wool both for the Warp and Woof being spun, and the Threads divided into Skains; that of the Woof is put on Spools (unless it has been spun upon them) fit for the Cavity or Eye of the Shuttle; and that for the Warp wound on a kind of wooden Bobins, to fit it for warping. When warped, it is stiffened with a kind of Size, used for the Warp of Cloth; and when dry it is put on the Loom.

When mounted on the Loom, the Workman raising and falling the Threads (which are passed through a Reed) by means of four Treddles placed underneath the Loom, which he makes to work transversely equally, and alternately, one after another, with his Feet, in Proportion as the Threads are raised and lowered, throws the Shuttle across, from one Side to the other; and each Time that the Shuttle is thrown, and the Threads of the Woof crossed between those of the Warp, strikes it with the Frame to which the Reed is fastened, thro' whose Teeth the Threads of the Warp pass; and this Stroke he repeats twice or thrice, or even more, till he judges the crossing of the *Serge* sufficiently close. Thus he proceeds till the Warp is all filled with Woof.

The *Serge* now taken off the Loom, is carried to the Fuller, who fulls or scours it in the Trough of his Mill, with a kind of fat Earth for the Purpose, first purged of all Stones and Filth. After three or four Hours scouring, the Fuller's-Earth is washed out in fair Water, brought by little and little into the Trough, out of which it is taken when all the Earth is cleared: Then with a kind of Iron Pincers or Pliers, they pull off all the Knots, Ends, Straws, &c. picking out on the Surface on either Side: Then return it into the fulling Trough, where it is worked with Water somewhat more than luke-warm with Soap dissolved therein for near two Hours. It is then washed out till such Time as the Water becomes quite clear, and there be no Signs of

Soap left: Then it is taken out of the Trough, the Knots, &c. pulled off, and then put on the Tenter to dry, taking Care as fast as it dries, to stretch it out both in Length and Breadth, till it be brought to its just Dimensions. When half dried it is taken off the Tenter, dyed, sheared and pressed.

There are various Kinds of *Serges* denominated either from the Qualities thereof, or from the Places where they are wrought.—The most considerable is the *London Serge*, now highly valued abroad, particularly in *France*, where the Manufacture is carried on with good Success, under the Title of *Serge Façon de Londres*.—The Goodness of *Serge* is known by the Quilting, as that of Cloths by the Spinning.

Next comes *RATEEN*, which is a thick woollen Stuff quilted, wove on a Loom with four Treddles, like *Serges* and other Stuffs, that have the *Whale* or Quilting. There are some *Rateens* dressed, and prepared like Cloth; others left simply in Hair, and others where the Hair or Nap is freezed.—*Rateens* are chiefly manufactured in *France*, *Holland*, and *Italy*; and are mostly used in Linings.

From *Rateens* I'll pass to *FRIZE*, or *FREEZE*, which is a kind of woollen Cloth or Stuff for Winter's Wear, being frized or napt on one Side; whence in all Probability it derives its Name.

Of *Frizes* some are crossed, others not crossed. The former are chiefly of *English* Manufacture; the latter of *Irish*.

As to *freezing* of Cloth, it is forming the Nap of a Cloth or Stuff into a Number of little hard Burs, or Prominences, covering almost the whole Ground thereof.

Some Cloths are only *freezed* on the Back-side, as black Cloths; others on the Right-Side, as coloured and mixed Cloths, *Rateens*, *Bays*, *Frizes*, &c.

Freezing may be performed two Ways; one with the Hand, *i. e.* by means of two Workmen, who conduct a kind of Plank, that serve as a frizing Instrument. The other by a Mill, worked either by Water or a Horse; or sometimes by Men. This latter is esteemed the better Way of frizing; by reason the Motion being uniform and regular, the little Knots of the *Freezing* are formed more equably, and alike. The Structure of this useful Machine is as follows.

The three principal Parts are, the *Freezer* or *Crisper*, the *Freezing-Table*, and the *Drawer* or *Beam*.—The two first are two equal Planks or Boards, each about 10 Foot long, and 15 Inches broad; differing only in this, that the *Frizing-Table* is lined or covered with a kind of coarse woollen Stuff, or a rough sturdy Nap; and that the *Frizer* is incrustated with a kind of Cement, composed of Glue, Gum arabick, and yellow Sand, with a little *Aqua vitæ*, or Urine. The *Beam*, or *Drawer*, thus called by reason it draws the Stuff from between the *Frizer* and *Frizing-Table*, is a wooden Roller, beset all over with little fine short Points or Ends of Wire, like those of Cards used in carding of Wool.

Next come *BAYS*, which is a kind of coarse, open woollen Stuff, having a long Nap; sometimes frized on one Side, and sometimes not frized, according to the Uses it is intended for.—This Stuff is without *Wale*, being wrought on a Loom with two Treddles, like *Flannel*. The Manufacture of *Bays* is very considerable in *England*, particularly about *Colchester*; and in *Flanders* about *Lisle*, and *Tournay*, &c.

Formerly the *French*, as well as *Italians*, were furnished with *Bays* from *England*; but of late the *French* Workmen have undertaken to counterfeit them, and set up Manufactures of their own; and that with Success, especially at *Nismes*, *Montpelier*, &c.

The Export of *Bays* is very considerable to *Spain*, *Portugal*, and *Italy*. Their chief Use is for Linings, especially in the Army: The Looking-Glass-Makers also use them behind their Glasses, to preserve the Tin or Quicksilver; and the Case-Makers to line their Cases.

FLANEL, or *FLANNEL*, is next, which is a kind of slight, loose, woollen Stuff, not quilted, but very warm; composed of a Woof and Warp, and wove on a Loom with two Treddles, after the Manner of *Bays*, &c.

SAY, or *SAVE*, is a kind of *Serge*, or a very light crossed Stuff, all Wool; much used abroad for Linings, and by the Religious for Shirts; and in *England* the Quakers

Quakers for Aprons, for which Purpose it is usually green.

There are very considerable Manufactures hereof at *Sudbury* near *Colchester*; also at *Ypres*, *Hondscot*, &c. in *Flanders*, &c.—Those made in *England* are chiefly exported to *Portugal* and *Leghorn*.

The Working of the several Commodities heretofore mentioned, and of many others, is called *Woollen Manufactory*; which makes the principal Article in the foreign and domestick Trade of *Great Britain*; being that which furnishes the Cargoes of their Vessels, that employs their People, &c. and may be said to have had its Rise in the 15th Century.

Till that Time the *English* Wool was all sold in the Fleece, to such of their Neighbours as came to fetch it. Among their Customers however, the principal were the *Flemings* and *Brabanters*; and particularly the Merchants of *Ghent* and *Louvain*; who took off vast Quantities to supply two Manufactories that had flourished in these two Cities from the 10th Century; and had furnished the greatest Part of *Europe*, and even *England* itself, with all Sorts of woollen Cloths, &c.—But the Richness of the Manufactories of *Ghent*, and the incredible Number of Hands employed therein, having spirited up the Inhabitants to revolt divers Times against their Sovereign, on account of certain Taxes which they refused to pay; the Seditious were at length punished and dispersed, and Part of them took Refuge in *Holland*, and the rest in *Louvain*.

These last, together with their Art of manufacturing Cloths, carried with them their Spirit of Sedition; and it was not long ere several of them, to avoid the Punishment they had deserved for killing some of the Magistrates, removed into *England*; where they instructed the *English* how to work their own Wool.

This Establishment is referred to the Year 1420, from which Time no Endeavours have been spared to keep the *English* Wool in the Kingdom.

The President *Thuanus* makes this Epocha 100 Years later; and attributes the Establishment of the *Woollen Manufacture* in *England* to Queen *Elizabeth*, and the Troubles about Religion, which the Severity of the Duke of *Alva*, and the *Spanish* Inquisition had occasioned, and kept up so long in the *Low Countries*.—But what that noble Author says, is rather to be understood of their Perfection than their first Establishment; and of the several great Manufactories then set up at *Norwich*, *Colchester*, *Sandwich*, *Hampton*, &c.—For in the *English* and *Flemish* Historians, we find mention made of the Manufactures of *London*, long before any Part of the seventeen Provinces had attempted to throw off the *Spanish* Yoke.

As this Manufacture now stands, Dr. *Davenant* and Mr. *King* computes the Product thereof to be eight Millions *per Annum*; three Fourths whereof are consumed at home, and the rest exported.

So jealous are now the *English* of their Woollens, that besides the Precautions taken to use all their own Wool themselves, they have added that of selling them themselves, and of carrying them to the Places where they are required; not admitting Strangers to come and buy any in *England*.

And hence the Establishment of those famous Magazines in *Holland*, the *Levant*, and the North, where their Woollen are repositied, to be vended by Factors or Commissioners. The Magazine in *Holland* has changed Place divers Times; and it has been successively at *Middleburgh*, *Delf*, *Rotterdam*, and *Dort*, where it now remains; and where all the *Germans* come to furnish themselves.—That for the *Levant* is at *Smyrna*; and that for the North at *Archangel*.

From the Woollen Manufactures I'll pass to the Silk ones, informing ourselves, previously to it, what Silk is; and how many different Sorts of Silks there are?

SILK, *Sericum*, is a very soft, fine, bright, delicate Thread; the Work of an Insect called *Bombyx*, or the *Silk-worm*.

The Antients were but little acquainted with the Use and Manufacture of *Silk*: They took it for the Work of a Sort of Spider or Beetle, who spun it out of its Entrails, and wound it with its Feet about the little Branches of Trees.—This Insect they called *Ser*, from *Seres*, a Peo-

ple in *Scythia*, who kept it; whence the *Silk* itself they called *Sericum*.—But the *Ser* has very little Affinity with our *Silk-worm*, *Bombyx*: The former living five Years, but the latter dying annually, enveloped in a yellowish Bag, or Ball; which wound out into little Threads, makes what we call *Silk*.

It was in the Isle of *Cos*, that the Art of manufacturing *Silk* was first invented; and *Pamphila*, Daughter of *Platis*, is honoured as the Inventor. The Discovery was not long unknown to the *Romans*. *Silk* was brought them from *Serica*, where the Worm was a Native. But so far were they from profiting by the Discovery, that they could not be induced to believe that so fine a Thread should be the Work of a Worm, and thereupon formed a thousand chimerical Conjectures of their own.

This Temper rendered *Silk* a very scarce Commodity among them for many Ages; it was even sold Weight for Weight with Gold, insomuch that *Vopiscus* tells us, the Emperor *Aurelian* refused the Empress his Spouse a Suit of *Silk*, which she solicited of him with much Earnestness; merely on account of its Dearness. At length two Monks coming from the *Indies* to *Constantinople* in 555, brought with them great Quantities of *Silk-worms*, with Instructions for the hatching of their Eggs, rearing and feeding the Worms, drawing out the *Silk*, spinning and working it. Upon this Manufactures were set up at *Athens*, *Thebes*, and *Corinth*.

About the Year 1130, Roger King of *Sicily* established a *Silk* Manufacture at *Palermo*, and another in *Calabria*, managed by Workmen who were Part of the Plunder brought from *Athens*, *Corinth*, &c. whereof that Prince made a Conquest, in his Expedition to the Holy Land. By Degrees, *Mezeray* adds, the rest of *Italy* and *Spain* learned from the *Sicilians* and *Calabrians*, the Management of the *Silk-worms* and the working of *Silk*: And at length the *French*, by Right of Neighbourhood, a little before the Reign of *Francis I.* began to imitate them.

The great Advantage the new Manufacture turned to, made *James I.* King of *England*, very earnest for its being introduced into his Dominions: Accordingly it was recommended several Times from the Throne, and in the most earnest Terms to plant Mulberry-Trees, &c. for the Propagation of *Silk-worms*; but unhappily without Effect; though from the various Experiments we meet withal in the Philosophical Transactions and other Places, it appears that the *Silk-worm* thrives, and works as well in all Respects in *England*, as in any other Part of *Europe*.

In ten Days Time the *Silk-worm* having brought its Ball to its Perfection, it must be taken down from the Branches of the Mulberry-Tree, where it is hung. But this Point requires a deal of Attention; for there are some Worms more lazy than others; and it is very dangerous waiting till they make themselves a Passage; which usually happens about the 15th Day of the Month.

The first, finest, and strongest Balls are kept for the Grain; the rest are carefully wound: Or, if it is desired to keep them all, or if there be more than can be well wound at once; they lay them for some Time in an Oven moderately hot, or else expose them for several Days successively to the greatest Heat of the Sun, in order to kill the Insect; which, without this Precaution, would not fail to open itself a Way to go; and use all those new Wings abroad it has acquired within.

Ordinarily, they only wind the more perfect Balls. Those that are double, or too weak, or too coarse, are laid aside; not as altogether useless, but that being improper for Winding, they are reserved to be drawn out into Skains.

The Balls are of different Colours; the most common are yellow, Orange colour, Isabella, and Flesh-colour. There are some also of a Sea-green; others of a Sulphur-colour, and others white: But there is no Necessity for separating the Colours and Shades to wind them apart; as all the Colours are to be lost in the future scouring and preparing of the *Silk*.

To wind the *Silk* from off the Balls, two Machines are necessary; the one a Furnace, with its Copper; the other a Reel or Frame to draw the *Silk*. The Winder then seated near the Furnace, throws into the Copper of Water over the Furnace (first heated and boiled to a certain

certain Degree, which Custom alone can teach) a Handful or two of Balls which have been first well purged of their loose furry Substance. He then stirs the whole very briskly about with birchen Rods, bound and cut like Brushes; and when the Heat and Agitation have detached the Ends of the *Silk* off the Rods, which are apt to catch on the Rods, he draws them forth; and joining ten or twelve, or even fourteen of them together, he forms them into Threads, according to the Bigness required, to the Work they are destined for: Eight Ends sufficing for Ribbands; and Velvets, &c. requiring no less than fourteen. The Ends thus joined into two or three Threads, are first passed into the Holes of three Iron Rods, in the fore Part of the Reel, then upon the Bobbins or Pullies, and at last are drawn out to the Reel itself, and there fastened; each to an End of an Arm or Branch of the Reel. Thus disposed, the Workman giving Motion to the Reel, by turning the Handle, guides his Threads; substitutes new ones when any of them break, or any of the Balls are wound out; strengthens them where necessary, by adding others; and takes away the Balls worn out, or that having been pierced are full of Water.

In this Manner two Workmen will spin and reel three Pounds of *Silk* in a Day; which is another quicker Dispatch than is made by the Spinning-wheel, or Distaff. Indeed all *Silks* cannot be spun and reeled after this Manner: Either by reason the Balls have been perforated by the *Silk-Worms* themselves, or because they are double, or too weak to bear the Water; or because they are coarse, &c. of all these together, they make a particular Kind of *Silk* called *Floretta*; which being carded or even spun on the Distaff, or the Wheel, in the Condition it comes from the Ball, makes a tolerable *Silk*.

As to the Balls, after opening them with Scissars, and taking out the Insects (which are of some Use for the feeding of Poultry) they are steeped three or four Days in Troughs, the Water whereof is changed every Day, to prevent their stinking.

When they are all well softened by this scouring, and cleared of that gummy Matter the Worm had lined the Inside withal, and which renders it impenetrable to the Water, and even to Air itself, they boil them half an Hour in a Lye of Ashes, very clear, and well strained: And after washing them out in the River, and drying them in the Sun, they card, and spin them on the Wheel, &c. and thus make another kind of *Floretta*, somewhat inferior to the former.

The several Preparations which *Silks* undergo, to fit them to be used in the Manufacture of Silken Stuffs, are *Spinning*, *Reeling*, *Milling*, *Bleaching*, and *Dying*.

The two first we have already spoke of, as they are concerned in drawing the *Silks* from off the Balls. As to the *spinning* and *reeling* of *raw Silk* off the Balls, such as they are brought hither from *Italy*, the *Levant*, &c. the first is chiefly performed on the Spinning-Wheel; and the latter, either on Hand-reels, or on Reels mounted on Machines, which serve to reel several Skains at the same Time.

Milling, or *throwing* of *Silk*, is the last Preparation thereof before dying; serving to twist it more or less, according to the Work it is intended for.

To prepare the *Silk* for Milling, they are put in Water, inclosed between two Linnen Cloths.—The Mill is a square Machine, composed of several Pieces of Wood mortised in each other, so as to form a kind of large Cage, in the Center whereof are two Wheels, placed parallel over each other, whose Axis bears on two Posts. When the Machine is simple, a single Man turns those Wheels by means of a little Cogg, in which they catch, and a large Handle.

The Wheels put in Motion by the Handle, communicate their Motion to eight Windles or Reels, or even more, according to the Largeness of the Machine; the Flights or Arms whereof the *Silk* is wound, from off two Rows of Bobbins placed on each Side the Machine, each Row at the Height of one of the two Wheels in the Center. These Bobbins have their Motion by means of leathern Thongs, which beat on little Cylinders of Wood that support them, and turn at length on the two Wheels at the Center, so that the *Silk* on each Bobbin twists, as it winds and forms its separate Skain.

The smallest Wheel moves two hundred of these Bobbins, over which a single Person is sufficient to inspect, to put new Bobbins or Pools, in lieu of those discharged of their *Silk*, and to knot the Ends when they break.

For white Stuffs the *Silk* is bleached, which is done while it is yet raw, by putting it in a thin Linnen Bag, and thrown into a Vessel of boiling River Water, where, in Soap has been dissolved, then boiled two or three Hours, and the Bag being turned several Times, taken out, beaten, and washed in cold Water, mixed with Soap and a little Indigo: The Indigo gives it the bluish Cast always observed in white *Silks*. After taking it out of the second Vessel it is wrung out, and all the Water and Soap expressed, shook out to untwist and separate the Threads, and hung out in the Air, in a kind of Stove made on purpose, wherein is burnt Sulphur; the Vapour whereof gives the last Degree of Whiteness to the *Silk*.

There are several Sorts of *Silks*, viz. *raw Silk*, *boiled Silk*, *thrown* or *twisted Silk*, *slack Silk*, *Eastern*, *French*, *Sicilian*, *Italian*, *Spanish*, *Turky*, *China*, *Japan*, and *Indian Silks*.

Raw SILK, is that taken from the Ball, without any Coction; such as is most, if not all, that is brought into *England* from the *Levant*.

In the *French Silk-Works*, the greatest Part of this raw *Silk* passes for little better than a kind of fine *Floretta*; yet, when spun, it makes a fine Thread, and serves for the Manufacture of Stuffs of moderate Value and Lustre. But the *raw Silks* of the *Levant*, whence most of the *English* come, are exceeding fine and beautiful.—This Difference arises hence, that in *France* the best Balls are spun and wound in boiling Water, and only the Refuse made into *raw Silk*: Whereas in the *Levant*, there is no such Thing as spinning and winding on the Fire; but the *Silks* are all sent in Bales or Packs, as they are drawn from off the Balls: So that they are only distinguished by their Quality of fine, middling, and coarse.

Boiled SILK, is that which has been boiled in Water, to facilitate the spinning and winding. This is the finest of all the Sorts of *Silks* manufactured in *France*, and is seldom used but in the richest Stuffs; as Velvets, Taffeties, Damasks, Brocades, &c.—There is also another Kind of *boiled Silk*, which is prepared by boiling to be milled; and which cannot receive that Preparation without being first passed through hot Water.—By the Laws of *France*, it is prohibited to mix raw with boiled *Silk*; both as such a Practice spoils the dying, and as the raw *Silk* corrupts and cuts the boiled.

Thrown, or *Twisted SILKS*, are such, as besides their spinning and winding, have received their Milling or Throwing.

This they receive in a different Degree, as they are passed oftener or seldomer over the Mill; properly, however, *thrown Silks* are those wherein the Threads are pretty thick thrown, and are twisted several Times.

Slack SILKS, are such as are not twisted, but are prepared and dyed, for Tapestry, and other Works with the Needle.

Eastern, or *East-India SILK*, properly so called, is not the Work of the *Silk-Worm*, but comes from a Plant that produces it, in Pods, much like those of the Cotton-Tree. The Matter this Pod contains is extremely white, and moderately glossy; it spins easily, and is made into a kind of *Silk*, that enters the Manufacture of several *Indian* and *Chinese* Stuffs.

French SILKS, are those of the Provinces of *Languedoc*, *Dauphiné*, *Provence*, *Avignon*, *Savoy*, and *Lyons*.—This last Place indeed furnishes very few *Silks* of its own Growth; but is the great Staple whence the Merchants of *Paris*, and the other Cities are to fetch them: At least they are obliged to have them pass through *Lyons*, if they bring them from elsewhere, either by Land or Sea.—There are computed to enter *Lyons*, *communibus Annis*, 6000 Bales; the Bale valued at 160 lb weight: Of which 6000 Bales, there are 1400 from the *Levant*, 1600 from *Sicily*, 1500 from *Italy*, 300 from *Spain*, and 1200 from *Languedoc*, *Provence*, and *Dauphiné*.

At the Time when the Manufactures of *Lyons* were in the Height of their Prosperity, there were reckoned 18,000 Looms employed in the *Silk* Manufacture; but ever since several other Nations, who had no Notion of those

those Manufactures, have been instructed in it, by the *French* who have deserted their own Country, either by a Motive of Religion, or, on some other Account, the Number of Looms has been considerably reduced at *Lyons*; so that at present there are not above 8000 going. Though there be no Silk Manufacture in any Country whatever which comes near that of *Lyons*, either for the Strength of the Stuffs, the Beauty of the Pattern, and the Vivacity of the Colours.—They had formerly at *Tours* 700 Mills for winding and preparing the Silks; 8000 Looms to weave them, and 40,000 Persons employed in the Preparation and Manufacturing thereof; which Number is also considerably reduced.

The Commerce of the Silks of *Sicily* is very considerable; and the *Florentines*, *Genoese*, and *Luccese*, are the People who chiefly make it. Great Quantities are yearly brought thence, especially from *Messina*; part whereof they use in their own Manufactures, and sell the rest to their Neighbours the *French*, &c. with Profit.—The *Italians* have this Advantage, especially the *Genoese*, over other People, that having large Establishments in the Island, they are reputed as Natives, and pay no Duty for the Export.—Part of the *Sicilian* Silks are raw; the rest spun and milled; of which last Kind those of *S. Lucia* and *Messina* are the most valued. The raw unwrought Silks are always sold for ready Money; the others sometimes in Exchange for other Goods.—The Silks brought from *Italy* are partly wrought, and partly raw, and unwrought. *Milan*, *Parma*, *Lucca*, and *Modena*, furnishes none but the latter Kind; *Genoa* most of the former; *Bologna* affords both Kinds.

The *Spanish* Silks, are all raw; and are spun, milled, &c. in *England*, according to the several Works they are to be used in.

Turky Silks, are all raw.—One Advantage the *English* say they have in the Commerce of the *Levant*, in Silks, wanting in those of *Sicily*, is, that the latter is confined to a particular Season of the Year; whereas the former are brought at all Times. They are brought from *Aleppo*, *Tripoli*, *Sayda*, from the Isles of *Cyprus*, *Candia*, &c.—But the principal Place of Commerce, especially for the *Persian* Silks, is *Smyrna*. The Silks are brought hither in Caravans, from the Month of *January* to *September*. The Caravans in *January* are loaded with the finest Silks; those of *February* and *March* being in different ones; the rest the coarsest.

They all come from the several Provinces of *Persia*, chiefly those of *Quillan* and *Schirwan*, and the City of *Schamachia*, situate near the Edge of the *Caspian* Sea, from which three Places, a *Dutch* Author assures us, there do not come less than 30,000 Bales of Silk in a Year. *Ardenil*, or *Ardebil*, another City of *Persia*, not far distant from these Silk Countries, is the Place where these Silks are laid up, and whence the Caravans set out for *Smyrna*, *Aleppo*, and *Constantinople*; and it is this City, with *Schamachia*, that have always been esteemed the Center of the Silk Trade; which has been several Times attempted to be removed from *Smyrna*, and the *Mediterranean*, in favour of *Archangel* and the *White Sea*, by carrying them across *Muscovy*, by the *Volga* and *Dvina*, two Rivers that traverse the principal Provinces of that vast Empire.

This new Course of the *Persian* Silks into *Europe*, was first proposed by *Paolo Centurio*, a *Genoese*, to the Czar *Basil*, under the Pontificate of *Leo X.* The *French* had the same Design in 1626. The Duke of *Holstein*, in 1633, sent Embassadors to the Court of *Persia*, purely with the same View: And in 1668, the Czar *Alexis Michael* attempted the Thing himself; but was disappointed by the Rebellion of the *Cossacks*, and the Surprise of *Asfracan*.

In 1688, the Commerce of *Persian* Silks had like to have been removed from *Smyrna* by an Earthquake, which almost overturned the whole City: And doubtless the Removal had been effected, but for the vigorous Means used by the *Turks* to prevent it.—*Smyrna*, however, still remains in its ancient Possession; and the several Nations of *Europe* continue every Year to send their Fleets to fetch away the Silks; and Matters are like to remain so, unless the Conquests made by *Peter the Great*, along the *Caspian* Sea, enable his Successors, as it is certain himself had such a Thing in View, to

put this great Design in Execution.

Several Provinces of *China* are so fertile in Mulberry-Trees, and their Climate so agreeable to the Nature of *Silk-Worms*, that the Quantity of *Silk* here produced is incredible: The single Province of *Tchekiam* might supply all *China*, and even a great Part of *Europe* with this Commodity. The Silks of this Province are the most esteemed, though those of *Nankin* and *Canton* be excellent.

The Silk Trade is the principal in *China*, and that which employs the most Hands: But the *European* Merchants who deal in it, especially in wrought Silks, are to be careful of the spinning, &c. the Waste being usually very great, as the *French East-India* Company lately found to their Cost.

Japan would not afford fewer Silks than *China*; but that the *Japanese*, a barbarous and distrustful People, have interdicted all Commerce with Strangers, especially with *Europeans*; excepting with the *Dutch*, who are said to be admitted on certain impious Terms, related by *Tavernier*.

The Silks of the State of the Great Mogul are brought almost wholly from *Kasem-bazar*, a *Mediterranean* Place, whence they are conveyed by a Canal of 15 Leagues, into the *Ganges*, by which they are forwarded 15 Leagues further, to the Mouth of the famous River of *Indostan*. The Silk of *Kasem-bazar* is yellowish, as are also those of *Persia* and *Sicily*; there being none, as we know of, naturally white, but that of *Palestine*. The *Indians*, however, whiten it with a Lye made of the Ashes of a Tree, called *Adam's Fig-Tree*; but as the Tree is pretty scarce, the *Europeans* are forced to take the greatest Part of their Silks in the native Yellow.

Kasem-bazar alone is computed to furnish every Year 22,000 Bales of Silk, each Bale weighing 100 lb. The *Dutch* buy it almost all up; not to bring it into *Europe* no more than they do that of *Japan*; but to exchange it for other rich Merchandizes, particularly Bars of Silver, &c.

Thus furnished with all Sorts of Silks, at our Choice, we'll set ourselves to work; beginning by the most easy Manufacture, which is that of *Ribbands*.

RIBBAND, or *Ribbond*, is a narrow sort of Silk, chiefly used for Head-Ornaments, Badges of Chivalry, &c.

There are plain *Ribbands* and figured *Ribbands*; which are all wove in the same Manner, the Difference consisting only in the passing of the Threads, agreeable to the Design proposed.

Next comes *TAFFETY*, or *TAFFATY*, is a kind of fine, smooth, filken Stuff; having usually a remarkable Lustre or Gloss.

There are *Taffeties* of all Colours, some plain, others striped with Gold, Silver, Silk, &c. others chequered, others flowered, others in the *Chinese* Point, others the *Hungarian*; with various others, to which the Mode or the Caprice of the Workman, gives such whimsical Names, that it would be as difficult as it is useless to rehearse them; besides that, they seldom hold beyond the Year wherein they first rose. The old Names of *Taffeties*, and which still subsist, are *Taffeties* of *Lyons*, *Spain*, *England*, *Florence*, *Avignon*, &c.

The chief Consumption of *Taffeties* is in Summer-Dresses for Women, in Linings, Scarves, Coifs, Window-Curtains, &c.

There are three Things which contribute chiefly to the Perfection of *Taffeties*, viz. the Silk, the Water, and the Fire. The Silk is not only to be of the finest Kind, but it must be worked a long Time, and very much, before it be used. The watering, besides that it is to be given very lightly, seems only intended to give that fine Lustre, by a particular Property not found in all Waters. Lastly, the Fire, which is passed under it to dry the Water, has its particular Manner of Application, whereon the Perfection of the Stuff depends very much.

Ottavio May of *Lyons* is held the first Author of the Manufacture of glossy *Taffeties*, and Tradition tells us the Occasion of it.—*Ottavio*, it seems, going backward in the World, and not able to retrieve himself by the Manufacture of *Taffeties*, such as were then made, was one Day musing on his Misfortunes, and in musing, chanced to chew a few Hairs of Silk which he had in his Mouth. His Reverie being over, the Silk he spit

out

out seemed to shine, and on that Account engaged his Attention. He was soon led to reflect on the Reason; and, after a good deal of Thought, concluded that the Lustre of that Silk must come, 1. From his having pressed it between his Teeth. 2. From his having wet it with his *Saliva*, which had something glutinous in it: And 3. From its having been heated by the natural Warmth of his Mouth. All this he executed upon the next *Taffeties* he made; and immediately acquired immense Riches to himself, and to the City of *Lyons* the Reputation it still maintains, of giving the Gloss to *Taffeties*, better than any other City in the World.

It will not, we conceive, be less useful than curious, to give here the Description of the Engine contrived by *Oelavio* to give the Gloss to *Taffety*; to add the Manner of applying it, and the Composition of the Water used therein.

The Machine is much like a Silk Loom, except that instead of Iron Points, here are used a Kind of crooked Needles, to prevent the *Taffety* from slipping: At the two Extremities are two Beams; on one of which is rolled the *Taffety* to take the Gloss; and on the other, the same *Taffety* as fast as it had received it. The first Beam is kept firm by a Weight of about 200 Pounds; and the other turned by means of a little Lever passing through Mortices, at each End. The more the *Taffety* is stretched, the greater Lustre it takes; Care however is to be used it be not over-stretched.

Besides this Instrument for keeping the Stuff stretched, there is another to give it the Fire: This is a Kind of Carriage in Form of a long Square, and the Breadth of the *Taffeties*. It moves on Trundles, and carries a Charcoal Fire under the *Taffety*, at the Distance of about half a Foot.

The two Machines prepared, and the *Taffety* mounted, the Lustre is given it by rubbing it gently with a Ball, or Handful of Lifts of fine Cloth, as it rolls from one Beam to the other, the Fire, at the same Time, being carried underneath it to dry it. As soon as the Piece has its Lustre, it is put on new Beams to be stretched a Day or two, and the oftener this last Preparation is repeated, the more it increases the Gloss.

For black *Taffeties*, the Gloss is given with double Beer, and Orange or Lemon Juice; but this last is the least proper, as being apt to whiten. The Proportion of these two Liquors is a Gallon of Orange Juice to a Pint of Beer, to be boiled together to the Consistence of a Broth. For colour'd *Taffeties* they use Gourd-Water distilled in an Alembick.

Next comes *SATTIN*, or *SATIN*, which is a Kind of Silken Stuff, very smooth and shining, the Warp whereof is very fine, and stands out, the Woof coarser, and hid underneath; on which depends that Gloss and Beauty which gives it its Price. There are *Sattins* quite plain, others wrought, some flowered with Gold or Silk, others strip'd, &c. All the Varieties in the Fabrick of *Sattins* are made by using new Warps or Woofs. The finest *Sattins* are those of *Florence* and *Genoa*; yet the *French* will not allow those of *Lyons* any Thing inferior thereto. The *Sattins* of *Bruges* have their Warp of Silk, and their Woof of Thread.

Indian Sattins, or *Sattins* of *China*, are silken Stuffs, much like those manufactured in *Europe*. Of these some are plain, either white, or of other Colours; others worked, either with Gold or Silk; flower'd, damask'd, strip'd, &c. They are mostly valued because of their cleaning and bleaching easily, without losing any Thing of their Lustre. In other Respects they are inferior to those of *Europe*.

Father *Le Comte* observes, that the *Chinese* prepare their *Sattins* in Oil, to give them the greater Lustre; but this makes the Dust liable to hang to them.

SATTINET, or *SATTINADE*, is a very slight, thin Sort of *Satin*, chiefly used by the Ladies for Summer Night-Gowns, &c. and ordinarily strip'd.

We'll pass from this to *Damask*, which is a Sort of silken Stuff, having some Parts raised above the Ground, representing Flowers, or other Figures.

Damask is properly a Sort of Mohair and *Satin* intermixed, in such Manner as that what is not *Satin* on one Side, is on the other. The Elevation which the *Satin* makes on one Side is the Ground on the other. The

Flowers have a *Satin* Grain, and the Ground a Grain of *Taffetas*. It has its Name from its being originally brought from *Damascus* in *Syria*.

Next comes *BROCADE*, which is a Sort of Stuff or Cloth of Gold, Silver, or Silk, raised and enriched with Flowers, Foliages, or other Figures, according to the Fancy of the Manufacturer.

Formerly the Term was restrained to Cloth wove, either wholly of Gold, both Woof and Warp, or of Silver, or of both together; but by Degrees it came likewise to pass for such as had Silk intermixed, to fill up, and terminate the Flowers of Gold and Silver.

At present, any Stuff of Silk, *Satin*, or even simple *Taffety*, when wrought and enriched with Flowers, &c. obtains the Denomination of *Brocade*.

Next comes *TABBY*, which is a Kind of coarse *Taffety* water'd. It is manufactured like the common *Taffety*, excepting that it is stronger and thicker both in the Woof and Warp.

The Watering is given it by Means of a Calender, the Rolls whereof are of Iron or Copper, variously engraven, which, bearing unequally on the Stuff, renders the Surface thereof unequal, so as to reflect the Rays of Light differently.

MOHAIR is a Kind of Stuff, ordinarily of Silk, both Woof and Warp, having its Grain wove very close.

There are two Kinds of *Mohairs*, the one smooth and plain, the other water'd like *Tabbies*: The Difference between the two only consists in this, that the latter is calendered, the other not. There are also *Mohairs* both plain and water'd, whose Woof is woollen, Cotton or Thread.

From this I'll pass to *VELVET*, which is a rich Kind of Stuff, all Silk, cover'd on the Outside with a close, short, fine, soft Shag; the other Side being a very strong close Tissue.

The Nap or Shag, called also the *velveting* of this Stuff, is formed of Part of the Threads of the Warp, which the Workman puts on a long channelled Ruler or Needle; and which he afterwards cuts, by drawing a sharp steel Tool along the Channel of the Needle to the End of the Warp.

The principal and best Manufactories of *Velvet* are in *France* and *Italy*, particularly at *Venice*, *Milan*, *Florence*, *Genoa* and *Lucca*: There are others in *Holland*, set up by the *French* Refugees; whereof that at *Haerlem* is the most considerable: But these all come short (says an *English* Author) of the Beauty of those of *France*; and accordingly are sold for 10 or 15 per Cent. less. There are even some brought from *China*, but they are the worst of all.

There are *Velvets* of various Kinds, as *plain*, that is uniform and smooth, without either Figures or Stripes.

Figur'd VELVET, that is adorned and worked with divers Figures; though the Grounds be the same with the Figures; that is the whole Surface velveted.

Ramag'd or *branched VELVET*, representing long Stalks, Branches, &c. on a *Satin* Ground, which is sometimes of the same Colour with the *Velvet*, but more usually of a different one. Sometimes, instead of *Satin*, they make the Ground of Gold and Silver; whence the Denomination of *Velvets* with gold Ground, &c.

Shorn Velvet, is that wherein the Threads, that make the *velveting*, have been ranged in the channelled Ruler, but not cut there.

Strip'd VELVET, is that wherein there are Stripes of divers Colours running along the Warp; whether those Stripes be partly *Velvet*, and partly *Satin*, or all *velveted*.

Cut VELVET, is that wherein the Ground is a Kind of *Taffety*, or *Gros de Tours*, and the Figures *Velvet*.

Velvets are likewise distinguished, with Regard to their different Degrees of Strength and Goodness; into *Velvets* of four Threads, three Threads, two Threads, and a Thread and half: The first are those where there are eighteen Threads of Shag, or *Velveting* to each Tooth of the Reed; and the Second have only Six, and the Rest four. In General, all *Velvets* both worked and cut, shorn and flowered, have their Warp and Shag of Organism, spun and twisted, or thrown in the Mill; and their Woof of Silk well boiled, &c. They are all of the same Breadth.

All *Europe* agree that the *French* excel in all these Manufactures, which the *French* Refugees have carried every where, particularly into *England*, where they have met with great Encouragement, several of them having made considerable Fortunes. The *French* excel in an extraordinary Manner in the Manufactures of gold and silver Brocades, gold and silver Laces, &c. No other Nation having found the Secret yet to give them the same Lustre and Beauty.

From the Silk Manufactures, I'll pass to the *Linen ones*.

The *Linen* MANUFACTURE borrows its Name from *Line*, *Linum*, which is a Plant with a slender hollow Stem, usually about two Foot high (though I have seen some which measured above three Foot) whose Bark consists of Fibres or Threads, much like those of Hemp; which being dressed and worked in due Manner, makes that noble Commodity *Linen-cloth*. The Preparations *Line* must undergo to fit it for Spinning, are pulling, drying, and swingling; which Operations are inserted in my Treatise of Agriculture under the Letter A.

Line, after it has been prepared fit for Spinning, is called Flax, of which there is different Sorts, with Regard to the Degrees of Fineness; which Degrees it acquir'd through the Cards, which Card is much like that of Perriwig-makers, except that the Points are longer. For if the *Flax* be designed for fine Thread, it must pass through a closer Card, than when for coarse Thread.

Flax is spun either with the Distaff or the Wheel, and the Thread acquires its Degree of Fineness between the Fingers of the Operator. Of this Thread the *Linen-cloth* is wove on a Loom, with two Treddles, the Warp being always coarser than the Woof. If the Cloth is to be very white, the Thread is bleached before it is wove; if not, it is wove as it comes from off the Distaff without any other Preparation.

The finest of all *Linen-cloth* is commonly Cambrick, because wove of the finest Thread that can be spun; and the best Manufactures of this Sort of Cloth are in *French Flanders*.

The *Linen-Cloth*, commonly called *Holland*, is next to *Cambrick* for Fineness; and there are even *Hollands* much finer than some *Cambricks*. This Sort of *Linen-cloth* is chiefly wrought in the Provinces of *Holland*, *Frizeland*, and other Parts of the United Provinces, whence the Appellation. The principal Mart or Staple of this Cloth is at *Haerlem*, whither it is sent from most other Parts as soon as wove, there to be whitened the ensuing Spring.

That Manufacture in *Frizeland* is the most esteemed, and called *Frize-Holland*. It is the strongest and the best coloured of any of that Fineness. It is never calender'd nor thickened as the rest, but is imported just as it comes from the Whitster. It is distinguished by its being Yard, quarter and half wide, which is a half quarter more than those commonly called *Frize-Hollands*, which are not right.

Gulix HOLLAND is very white and fine, and is chiefly used for Shirts, being the Strongest of any for its Fineness, except true *Frize*. It is just Yard wide.

Alemacr HOLLAND is a very strong Cloth, and wears exceeding well. It is about Yard, quarter, and half wide.

There is a Manufacture of *Linen-cloth* at *Pontivy* in *Lower Britany*, which is nothing inferior to those of *Holland*, and which even excels in the Strength of the Cloth, which wears to the full as well, and is of much more Service, though not so dear.

I have been informed that they have brought lately the *Linen Manufacture* to a very great Perfection, both

in *Scotland* and *Ireland*; and that those of Sir *William Dalrymple*, in *Scotland*, are still preferable to any of the others; which, if true, I do not at all question but the *English* Nation will encourage those Manufactures, since it will be a Means to maintain a great Number of poor Families, which will be employ'd in those *Manufactures*, and keep them from starving; besides the Advantage of not being obliged to have Recourse to Foreign Parts, and pay very dear for Things which we can have of our own at a reasonable Rate.

After *Hollands*, or *fine Linnens* are taken from the Loom, while yet raw, they are steeped a Day in fair Water, washed out and cleared of their Filth, and thrown into a Bucking Tub, filled with cold Lixivium, or Lye of Wood-ashes and Water; when taken out of the Lye, they are washed in clear Water, spread in a Meadow, and watered from Time to Time, with Water from little Dishes, or Canals along the Ground, by means of Scoops, or hollow Peels of Wood, called by the *Dutch*, who pretend to be the Inventors of them, *Gieter*: After lying a certain Time on the Ground, they are passed through a new Lye poured on hot; and again washed in clear Water, and laid a second Time on the Ground, and every Thing repeated as before; then passed through a soft gentle Lye, to dispose them to resume the Softness which the other hardest Lye had taken from them, washed in clear Water, soaped with black Soap, and that Soap again washed out in clear Water; they are then steeped in Cow's Milk, the Cream first skimmed off, which finishes their Whitening; and Scowering gives them a Softness, and makes them cast a little Nap: When taken out of the Milk, they are washed in clear Water for the last Time. After all this Process, they give the Linnen its first Blue, by passing it through a Water wherein a little Starch, Smalt, and *Dutch Lapis* have been steeped. Lastly, the proper Stiffness and Lustre is given with Starch, pale Smalt, and other Gums, the Quantity and Quality whereof may be adjusted according to Occasion.

In fine Weather, the whole Process of *Bleaching* is completed in a Month's Time; in bad Weather it takes up six Weeks, or more.

To *bleach coarse Linnens*; they are taken from the Loom and laid in wooden Frames, full of cold Water; where, by means of wooden Hammers, worked by a Water Mill, they are beat so, as insensibly to wash and purge them of their Filth, then spread on the Ground, where the Dew, which they receive for eight Days, takes off more of their Impurity; then put in a kind of wooden Tubs or Pans, with a hot Lye over them, thus lixiviated, they are again purged in the Milk, laid afresh on the Ground, and after eight Days more, passed through a second Lye, and all Things repeated, till such Time as they have acquired a just Degree of Whiteness.

Persons appointed by the Trustees, for improving the Hempen and Flaxen Manufactures in *Scotland*, may enter into any Bleach Yard, back House, &c. and search all Rooms, Reives, and Boilers therein, and view the Lies, Refuse, and Dregs thereof; to see whether there have been any Lime, Pigeons Dung, or Soap-dregs used in the *bleaching* of Linnen Cloth or Yarn, contrary to the Statutes, 13 G. c. 26. § 16.

MUSLIN is also a fine Sort of Cloth, wholly Cotton; so called as not being bare, but having a downy Nap on its Surface, resembling Moss, which the *French* call *Mouffe*.

There are various Kinds of *Muslins* brought from the *East Indies*, *Cyhy*, *Bengal*, *Betelles*, *Tarnatans*, *Mulmuls*, *Tangeels*, *Terrindans*, *Douas*, &c.

X E R O P H A G I A .

XEROPHAGIA, XEROPHAGY (from *ξύς*, *Siccus*, dry, and *φαγω*, I eat) is the feeding on dry Food.

In the first Ages of Christianity, some not contented with simple Fasting, added the *Xerophagy* thereto; ab-

staining not only from Flesh and Wine, but also from all Flesh, succulent and vinous Fruits. And even brought themselves to bare Bread and Water; particularly most of the *Anachorets* of the Deserts of *Thebaides*; as *St. Paul the Hermit*, *Hilarion*, &c. Whence the Practice

Practice of Fasting and Abstinence was brought into the West; where it was never so severe as in the East, except among few Christians, who embraced the anachoretic Life, and retired into Deserts, or unfrequented Places; and in the celebrated Monastery of *La Trappe* in *Normandy*, which is a Reformation of the Order of *Cîteaux*, and where the Monks to this Day abstain from Flesh, Fish, Butter, Wine, &c. and live wholly on Bread and Pulses. Though there is retained yet in the Church a certain Sort of Abstinence and Fast, but not near so rigorous as was that of the primitive Christians.

Father *Thomassin* observes; that the antient Fast was to sup without dining, i. e. only to take one Meal, and that not till Afternoon: Adding, that to dine without supping was a Breach of the Fast. The Practice of the *Latin Church* was to fast 36 Days in the Year; which is as it were the Tithes of the Year.

The antient Catholics allowed of no obligatory or commanded Fast, besides that preceding *Easter*, since called *Lent*; the Terms of which were to forbear eating till the Evening.

According to *St. Jerom*, *St. Leo*, *St. Augustin*, and others, *Lent* must have been instituted by the Apostles. Their Way of reasoning is thus: Whatever is generally received throughout the whole Church, and whose Institution we do not find in any Council; must be esteemed to have been established by the Apostles; now such, they say, is the Fast of *Lent*. Its Institution is not spoke of in any Council; but many of the antient Councils, particularly that of *Nice*, that of *Laodicea*, &c. and some of the oldest Fathers, particularly *Tertullian*, speaks of it as a Thing of old Standing.

Some will have *Lent* to have been first instituted by Pope *Thelephorus*, in the second Century; others, who own that there was a kind of Abstinence observed in the antient Church before *Easter*, yet contend that it was voluntary, and was never enjoined by any Law, till the third Century.

There was some Difference between the Practice of the *Greek* and *Latin Churches*, as to the Observance of *Lent*; the *Greek* beginning a Week sooner, but at the same Time allowing more Days of Intermision than the *Latins*: Those who held it seven Weeks did not fast on *Saturdays*, as those who observed it but six did.

The antient *Latin Monks* had three *Lents*; the grand *Lent* before *Easter*, another before *Christmas*, called the *Lent of St. Martin*; and a third after *Whitsunday*, called the *Lent of St. John Baptist*: Each of which consisted of forty Days.

The *Greeks*, besides that before *Easter*, observed four others; that of the *Apostles*, of the *Assumption*, of *Christmas*, and of the *Transfiguration*; but they reduced each of them to the Space of seven Days. The *Jacobites* added a fifth, which they called the *Repentance of Nineveh*; and the *Maronites* a sixth, called the *Exaltation of the holy Cross*.

By the ninth Canon of the Council of *Toledo* it is ordained, that if any Persons, without evident Necessity, eat Flesh in *Lent*, they shall be deprived the Use of it all the rest of the Year.

The antient Catholics allowed of no obligatory or commanded Fasts besides *Lent*: The other Fasts observed were only of Devotion: Such were the fourth and fifth *Ferise*, i. e. *Wednesdays* and *Fridays*. This Fast was called *Station*. Besides these, there were occasional

Fasts enjoined by the Bishops, &c.

The three *Ferise* above-mentioned are seldom fasted at present, unless in what the *English* call *Ember-Week*, and the *French Quatre tems*; which are *Wednesday*, *Friday*, and *Saturday*, after *Quadragesima-Sunday*, after *Whitsunday*, after *Holy Rood Day*, in *September*; and after *St. Lucia's Day*, in *December*: which four Times answer well enough to the four Quarters of the Year, Spring, Summer, Autumn, and Winter.

M. *Sommer* thinks they were originally Fasts instituted to beg God's Blessing on the Fruits of the Earth. Agreeably to which *Skinner* supposes the Word *Ember* taken from the Ashes *Embers*, then strewed on the Head.

These *Ember Weeks* are now chiefly taken Notice of, on account of the Ordination celebrated at those Times, which in the *Catholick Church* is always the *Saturday* in the *Ember-Week*; and in the *Church of England* the *Sunday* following.

In the Book of *Hermas*, called the Pastor, the Angel tells him, The Day thou fastest thou shalt take nothing but Bread and Water; and having computed the usual Expences of each Day, thou shalt lay aside so much for the Widow, the Orphan, or the Poor.

In the same Passage the Fast is called *Station*, and the Person who fasted is enjoined to begin early in the Morning to retire to Prayer.

St. Fructuosus, *Fleury* tells us, going to suffer, some People, out of a Principle of Charity, offered him Drink to support him; but he refused it, saying, it is not yet Time to break Fast; for it was but Ten in the Morning, and it was *Friday*, *Station-Day*. Which shews the Exactness of the primitive Christians in this Point; and that Drinking was held breaking of Fast.

The Practice of Fasting is more antient than Christianity. The *Israelites* fasted often, and had their stated Fast-Days. The Day of Attonement, which they called *Kipparim*, was a Day of fasting, enjoined in *Levit. xxiii. 27*, &c. Some will have this the Day *St. Paul* refers to in *Acts xxvii. 9*. The *Jews* had likewise Fasts instituted by Precepts of the Synagogue: Such were those of the fourth, fifth, and tenth of the Month, mentioned by *Zechariah vii. 3.* and *viii. 19.*

The Heathens adopted the same Custom, in all Probability, from the People of God; though, like some Christian Sects, they were more inclined to feasting than to fasting; because among the latter Fasting smells as much of Popery, as it smelled of Judaism among the former.—Yet they fasted in the *Eleusinia*, as appears from *Arnobius*, and *Clemens Alexand.*

The Fasts of the *Calogeri* are so severe, that they remain seven Days without eating at all.

The *Turks* are so scrupulous on the Point of fasting, that they will not so much as take the Smell of any Perfume by the Nose. They hold that Odours themselves break Fast. If they bathe, it is forbid to put the Head under Water, for fear of swallowing any of it: And as for Women, they are forbid to bathe at all on Fast-Days, for a Reason peculiar to the Sex. This Custom of fasting, the *Turks* have borrowed from the *Jews* and Christians; their Legislator, the impious Monk *Sergius*, having compiled their ridiculous Religion from all other Religions existing then in the World, viz. Christianity, Judaism, and Paganism; with the Addition of a great Number of Absurdities and Impieties of his own.

Y A W N I N G.

YAWNING, *Oscitatio*, is an involuntary opening of the Mouth, occasioned by a Vapour, or Ventosity, endeavouring to escape; and generally witnessing an irksome Weariness, or an Inclination to sleep.

Yawning is performed by expanding almost all the Muscles of the voluntary Motion at the same Time; but most considerably those of the Lungs; by springing a great Quantity of Air, very slowly, and after retaining it some Time, and rarifying it, by expelling it again slowly, and restoring the Muscles to their natural State.

Hence its Effects are to move, accelerate, and distribute all the Humours of the Body, equally thro' all the Vessels; thereby disposing the Organs of Sensation, and all the Muscles of the Body for the Performance of their respective Functions.

The nervous Membrane of the *Œsophagus* has been held the Seat of Yawning, which, according to the usual System, is produced whenever any Irritation determines the Spirits to flow thither in too great Abundance. The Cause of the Irritation is supposed to be some troublesome

some Humour wetting the inner Membrane of the Œsophagus; which Humour may proceed either from the Glands spread throughout the Membrane, or from acid Vapours arising from the Stomach, and condensing on the Sides of the Œsophagus. By such Means the nervous Fibres of the Membrane of the Gullet being irri-

tated, dilate the Gullet; and the Mouth is constrained to follow the same Motion, as being lined with the same Membrane.

The Remedy *Hippocrates* prescribes against continual *Yawning*, is to make long Breathings or Respirations.

Y N C A.

Y N C A, INCAN, or INCA, is an Appellation antiently given to the Kings of *Peru*, and the Princes of their Blood; the Word signifying literally, *Lord, King, Emperor, and Royal Blood.*

The King himself was particularly called *Capac Inca*, i. e. Great Lord.—His Wife *Pallas*, and the Princes simply *Inca's*. These *Incas*, before the Arrival of the *Spaniards*, were exceedingly powerful. Their People revered them to Excess, as believing them to be Sons of the Sun, and never to have committed any Fault.—If any Person offended the Royal Majesty in the smallest

Matter, the City he belonged to was totally demolished.

When they travelled; whatever Chamber they lay in on the Road was walled up, as soon as they departed, that no Body might ever enter it after them. The like was done to the Room wherein the King died; in which, likewise, all the gold, silver, and precious Furniture was immured; and a new Apartment built for his Successor.

His beloved Wives, Domesticks, &c. likewise sacrificed themselves; and were buried alive in the same Tomb along with him.

ZOOTOMY.

ZOOTOMY, is the Art or Act of dissecting living Creatures.

Zootomy amounts to the same with *comparative Anatomy*, which is that Branch of Anatomy which considers the same Parts of different Animals, with relation to the particular Structure and Formation, which is best suited to the Manner of living, and to the Necessity of every Creature.

Thus in the *comparative Anatomy* of Stomachs, for Instance, it is remarkable that those Creatures which have the Opportunities of frequent feeding, have their Stomach very small, in comparison to some Creatures of Prey, which probably may be under a Necessity of fasting a long Time; and therefore have Stomachs large enough to hold Food sufficient for such a Time.

Ruminating Animals, have four Stomachs; yet it is observed that some of these, which have four in *Europe*, have only two in *Africa*, probably by reason the Herbs in *Africa* are more nourishing.

Ruminants, Mr. Ray observes, are all quadrupedal, hairy, and viviparous; some with hollow and perpetual Horns, others with deciduous ones.

The horned Ruminants have all four Stomachs, appropriated to the Office, viz. 1. The *Rumen*, *Venter Magnus*, or what is called in *English* the *Paunch*, or inward, which receives the Meat slightly chewed, retains it awhile, and then delivers back again into the Mouth, which is called in *English* the *Cud*, to be re-chewed.—2. The *Reticulum*, called in *English* the *Honey-comb*, from its internal Coat being divided into Cells, like Honey-combs.—3. What is commonly called *Anafus*, and Mr. Ray, *Echinus*; this being difficult to clear, is commonly thrown away, and called the *Manifold*.—4. That which *Gaza* calls *Abamafus*, the *English* call the *Maw*.

The Rumen or Paunch is much the largest of all the Stomachs; as being to contain both the Drink, and the whole crude Mass of Aliment, which there lie and macerate together; to be thence remitted to the Mouth, to be re-chewed and comminuted, in order to their fur-

ther Digestion in the other Ventricles.

In the *Rumen*, or first Ventricle of Camels, are found divers Sacculi, which contain a considerable Quantity of Water; an admirable Contrivance for the Necessities of that Animal, which living in dry Countries, and feeding on dry hard Food, would be in Danger of perishing, but for those Reservoirs of Water.

Burnet, in his *Thesaur. Med.* gives several Instances of Men that ruminated, from *Salmuth*, *Rhodrics*, &c.—*Dr. Stare*, in the *Philosophical Transactions*, gives us a fresher Instance, in an *Englishman* living at *Bristol*. His Account as it is curious, and may let us see a little how it fares with ruminating Animals, we shall here add.

‘He begins to chew his Meat over again within a Quarter of an Hour after Meals, if he drinks with it; if not, somewhat later. His chewing after a full Meal lasts about an Hour and a half: And if he goes to Bed presently after Meals, he cannot sleep till the usual Time of chewing be over. The Victuals upon the Return, taste somewhat more pleasantly than at first, Bread, Meat, Cheese, and Drink, return much of such Colours as they would be or, were they mixed together in a Mortar. Liquids, as Spoon-meat, return to his Mouth all one as dry and solid Food. The Victuals seem to him to lie heavy till they have passed the second chewing; after that they pass clean away. If he eats Variety of Things, that which passes down first comes up again first. If the ruminating Faculty chance to leave him, it signifies Sickness; and it is never well with him till it return. He is about 20 Years of Age, and was always thus since he can remember. His Father does the like sometimes, but in small Quantities.’

Birds that live ordinarily on Seeds with a tough Rind, have a kind of Stomach called the *Crap* or *Gizzard*, consisting of four large Muscles without-side, and a hard callous Membrane within.—Such as live on Flesh, as Eagles, Vultures, &c. have only one.

First EQUATION of the apparent Time.
Subtract from the apparent, if it be the mean Anomaly of the Sun.

TABLE of Equation of Days.

Sign.	0	1	2	3	4	5	
0	"	"	"	"	"	"	
0	0 00	3 46	6 34	7 40	6 42	3 54	30
1	0 08	3 53	6 38	7 40	6 38	3 47	29
2	0 16	3 59	6 42	7 40	6 34	3 40	28
3	0 23	4 06	6 46	7 40	6 30	3 33	27
4	0 31	4 13	6 49	7 39	6 26	3 25	26
5	0 39	4 19	6 53	7 39	6 21	3 18	25
6	0 47	4 26	6 57	7 38	6 17	3 11	24
7	0 55	4 32	7 00	7 38	6 12	3 03	23
8	1 03	4 38	7 03	7 37	6 07	2 56	22
9	1 10	4 45	7 06	7 36	6 02	2 48	21
10	1 18	4 51	7 09	7 34	5 57	2 40	20
11	1 26	4 57	7 12	7 33	5 52	2 33	19
12	1 34	5 03	7 14	7 32	5 46	2 25	18
13	1 41	5 09	7 17	7 30	5 41	2 17	17
14	1 49	5 15	7 19	7 28	5 36	2 09	16
15	1 57	5 20	7 22	7 26	5 30	2 01	15
16	2 04	5 26	7 24	7 24	5 24	1 53	14
17	2 12	5 32	7 26	7 22	5 18	1 45	13
18	2 19	5 37	7 28	7 20	5 12	1 37	12
19	2 27	5 42	7 30	7 18	5 06	1 29	11
20	2 34	5 48	7 31	7 15	5 00	1 21	10
21	2 42	5 53	7 33	7 12	4 54	1 13	9
22	2 49	5 58	7 34	7 10	4 48	1 05	8
23	2 56	6 03	7 35	7 07	4 41	0 57	7
24	3 03	6 07	7 36	7 04	4 35	0 49	6
25	3 11	6 12	7 37	7 00	4 28	0 41	5
26	3 18	6 17	7 38	6 57	4 22	0 33	4
27	3 25	6 21	7 39	6 54	4 15	0 24	3
28	3 32	6 26	7 40	6 50	4 08	0 16	2
29	3 39	6 30	7 40	6 46	4 01	0 08	1
30	3 46	6 34	7 40	6 42	3 54	0 00	0
	11	10	9	8	7	6	

G	♈ 'S''	♉ 'A''	♊ 'A'	♋ 'S''	♌ 'S''	♍ 'S''
0	7 45	1 11	4 3	0 59	5 43	2 8
1	7 26	1 24	4 0	1 15	5 45	1 55
2	7 7	1 37	3 56	1 29	5 46	1 37
3	6 48	1 49	3 51	1 42	5 47	1 21
4	6 29	2 1	3 45	1 54	5 48	1 5
5	6 10	2 12	3 39	2 6	5 48	0 48
6	5 51	2 23	3 32	2 19	5 48	0 30
7	5 31	2 33	3 25	2 32	5 46	0 12
8	5 11	2 43	3 17	2 44	5 44	0 A 7
9	4 51	2 53	3 9	2 56	5 40	0 26
10	4 31	3 3	3 0	3 8	5 36	0 45
11	4 11	3 13	2 51	3 20	5 31	1 3
12	3 52	3 22	2 41	3 32	5 25	1 21
13	3 33	3 30	2 31	3 43	5 19	1 40
14	3 14	3 37	2 21	3 54	5 13	1 59
15	2 55	3 43	2 10	4 4	5 6	2 19
16	2 37	3 48	2 0	4 14	4 58	2 40
17	2 19	3 53	1 49	4 24	4 49	3 1
18	2 1	3 57	1 37	4 34	4 39	3 22
19	1 43	4 1	1 25	4 43	4 30	3 44
20	1 26	4 5	1 13	4 51	4 20	4 6
21	1 9	4 8	1 1	4 59	4 9	4 29
22	0 52	4 10	0 49	5 6	3 57	4 51
23	0 35	4 12	0 37	5 13	3 45	5 13
24	0 19	4 13	0 24	5 19	3 32	5 35
25	0 3	4 11	0 10	5 24	3 19	5 57
26	0 A 12	4 9	0 S 3	5 29	3 5	6 19
27	0 27	4 8	0 16	5 33	2 51	6 41
28	0 42	4 6	0 29	5 37	2 37	7 2
29	0 57	4 5	0 44	5 40	2 23	7 23
30	1 11	4 3	0 59	5 43	2 8	7 44

Add to the apparent Time, if it be the mean Anomaly of the Sun.

Last EQUATION of the apparent Time.
Subtract from the apparent, if it be the Place of the Sun.

TABLE of Equation of Days.

♈	♉	♊	♋
"	"	"	"
0	0 00	8 24	8 46
1	0 20	8 35	8 36
2	0 40	8 45	8 25
3	1 00	8 54	8 14
4	1 19	9 03	8 01
5	1 39	9 11	7 49
6	1 59	9 18	7 35
7	2 18	9 25	7 21
8	2 37	9 31	7 06
9	2 57	9 36	6 51
10	3 16	9 41	6 35
11	3 34	9 45	6 19
12	3 53	9 49	6 02
13	4 11	9 51	5 45
14	4 29	9 53	5 27
15	4 47	9 55	5 09
16	5 04	9 55	4 50
17	5 21	9 55	4 31
18	5 38	9 54	4 12
19	5 54	9 52	3 52
20	6 10	9 50	3 32
21	6 26	9 47	3 12
22	6 41	9 43	2 51
23	6 55	9 38	2 30
24	7 10	9 33	2 09
25	7 23	9 27	1 48
26	7 36	9 20	1 27
27	7 49	9 13	1 05
28	8 01	9 05	0 43
29	8 13	8 56	0 22
30	8 21	8 46	0 00
♈	♉	♊	♋

G	♈ 'A''	♉ 'A''	♊ 'A''	♋ 'A''	♌ 'S''	♍ 'S''
0	7 44	15 34	13 25	0 59	11 48	14 26
1	8 5	15 42	13 7	0 27	12 4	14 29
2	8 25	15 48	12 48	0 S 5	12 19	14 21
3	8 45	15 53	12 29	0 35	12 35	14 13
4	9 5	15 57	12 10	1 4	12 50	14 4
5	9 25	16 1	11 50	1 33	13 5	13 55
6	9 44	16 5	11 30	2 3	13 19	13 46
7	10 3	16 7	11 10	2 32	13 32	13 37
8	10 22	16 8	10 49	3 1	13 44	13 27
9	10 41	16 9	10 28	3 29	13 55	13 17
10	11 0	16 9	10 6	3 57	14 5	13 7
11	11 19	16 9	9 42	4 25	14 14	12 56
12	11 38	16 8	9 17	4 53	14 22	12 44
13	11 57	16 7	8 51	5 20	14 29	12 32
14	12 15	16 5	8 25	5 48	14 35	12 19
15	12 33	16 1	7 58	6 15	14 40	12 6
16	12 50	15 56	7 31	6 42	14 45	11 52
17	13 7	15 50	7 5	7 9	14 50	11 37
18	13 22	15 44	6 38	7 34	14 54	11 21
19	13 36	15 37	6 12	7 58	14 56	11 4
20	13 49	15 30	5 45	8 21	14 58	10 46
21	14 2	15 22	5 19	8 45	14 59	10 28
22	14 14	15 13	4 52	9 8	15 0	10 10
23	14 26	15 3	4 26	9 31	15 0	9 52
24	14 37	14 52	3 58	9 53	15 0	9 34
25	14 47	14 40	3 30	10 13	14 58	9 16
26	14 57	14 27	3 1	10 32	14 55	8 58
27	15 7	14 13	2 31	10 51	14 51	8 40
28	15 16	13 58	2 1	11 10	14 47	8 22
29	15 25	13 42	1 30	11 29	14 42	8 4
30	15 34	13 25	0 59	11 48	14 36	7 45

TABLE of the mean Motions of the Earth; of the Place of the PERIHELION, and of the Precession of the EQUINOX from the first Star of Aries.

Years of Christ. Curr.	Mean Motion of the Earth, from the vernal Equi- nox.				Motion of the Pe- rihelion of the Earth from the vernal Equinox.			
	s	o	'	"	s	o	'	"
1	9	7	53	3	2	14	3	30
1501	9	19	13	9	3	4	53	30
1581	9	19	49	26	3	6	0	10
1601	9	19	58	30	3	6	16	50
1621	9	20	7	34	3	6	33	30
1641	9	20	16	38	3	6	50	10
1661	9	20	25	42	3	7	6	50
1681	9	20	34	46	3	7	23	30
1701	9	20	43	50	3	7	40	10
1721	9	20	52	54	3	7	56	50
1741	9	21	1	58	3	8	13	30
1761	9	21	11	2	3	8	30	10
1781	9	21	20	6	3	8	46	50
1801	9	21	29	11	3	9	3	30

Years ex- pand.	Mean Motions for the Years expand.				Motions of the Pe- rihelion, and of the fixed Stars for the Years expand.			
	s	o	'	"	s	o	'	"
1	11	29	45	40	00	00	00	50
2	11	29	37	20	00	00	1	40
3	11	29	17	00	00	00	2	30
4	00	00	1	48	00	00	3	20
5	11	29	47	28	00	00	4	10
6	11	29	33	8	00	00	5	00
7	11	29	18	48	00	00	5	50
8	00	00	3	36	00	00	6	40
9	11	29	49	16	00	00	7	30
10	11	29	34	57	00	00	8	20
11	11	29	20	37	00	00	9	10
12	00	00	5	26	00	00	10	00
13	11	29	51	6	00	00	10	50
14	11	29	36	46	00	00	11	40
15	11	29	22	26	00	00	12	30
16	00	00	7	14	00	00	13	20
17	11	29	52	54	00	00	14	10
18	11	29	38	34	00	00	15	00
19	11	29	24	14	00	00	15	50
20	00	00	9	4	00	00	16	40
40	00	00	18	8	00	00	33	20
60	00	00	27	12	00	00	50	00
80	00	00	36	16	00	01	6	40
100	00	00	45	20	00	01	23	20
200	00	1	30	41	00	02	46	40
300	00	2	16	6	00	04	10	00
400	00	3	1	22	00	05	33	20
500	00	3	46	42	00	06	56	40
600	00	4	32	3	00	08	20	00
700	00	5	17	23	00	09	43	20
800	00	6	2	44	00	11	6	40
900	00	6	48	4	00	12	29	00
1000	00	7	33	25	00	13	53	20
2000	00	15	6	50	00	27	46	40
3000	00	22	40	15	1	11	40	40
4000	01	00	13	41	1	25	33	20
5000	01	7	47	1	1	9	26	40

TABLE of the mean Motions of the Earth for every Day of the Year.

Days	JANUARY.					M. P.	FEBRUARY					M. P.	MARCH					M. P.	APRIL.					M. P.	MAY					M. P.	JUNE.					M. P.
	Mean Motions of the Earth.						Mean Motions of the Earth.						Mean Motions of the Earth.						Mean Motions of the Earth.						Mean Motions of the Earth.						Mean Motions of the Earth.					
	s	o	'	"	'''		s	o	'	"	'''		s	o	'	"	'''		s	o	'	"	'''		s	o	'	"	'''		s	o	'	"	'''	
1	0	00	59	08	00	1	01	32	27	04	1	29	08	20	08	1	2	29	41	38	13	3	29	15	48	17	4	29	49	06	21					
2	0	01	58	17	00	1	02	31	25	05	2	00	07	28	08	2	3	00	40	46	13	4	00	14	56	17	5	00	48	14	21					
3	0	02	57	25	00	1	03	30	43	05	2	01	06	36	08	3	3	01	39	55	13	4	01	14	04	17	5	01	47	23	21					
4	0	03	56	33	01	1	04	29	52	05	2	02	05	43	09	4	3	02	39	03	13	4	02	13	13	17	5	02	46	31	21					
5	0	04	55	42	01	1	05	29	00	05	2	03	04	53	09	5	3	03	38	11	13	4	03	12	21	17	5	03	45	39	21					
6	0	05	54	50	01	1	06	28	08	05	2	04	04	01	09	6	3	04	37	20	13	4	04	11	29	17	5	04	41	48	21					
7	0	06	53	58	01	1	07	27	16	05	2	05	03	10	09	7	3	05	36	27	13	4	05	10	38	17	5	05	43	56	22					
8	0	07	53	07	01	1	08	26	25	05	2	06	02	18	09	8	3	06	35	36	13	4	06	09	46	17	5	06	43	04	22					
9	0	08	52	15	01	1	09	25	33	06	2	07	01	26	09	9	3	07	34	45	13	4	07	08	54	18	5	07	42	13	22					
10	0	09	51	23	01	1	10	24	41	06	2	08	00	35	09	10	3	08	33	53	14	4	08	08	03	19	5	08	41	21	22					
11	0	10	50	32	02	1	11	23	50	06	2	08	59	43	10	11	3	09	33	01	14	4	09	07	11	18	5	09	40	29	22					
12	0	11	49	40	02	1	12	22	58	06	2	09	58	51	10	12	3	10	32	10	14	4	10	06	19	18	5	10	39	38	22					
13	0	12	48	48	02	1	13	22	6	06	2	10	58	00	10	13	3	11	31	18	14	4	11	05	28	18	5	11	38	46	22					
14	0	13	47	57	02	1	14	21	15	06	2	11	57	08	10	14	3	12	30	26	14	4	12	04	36	18	5	12	37	54	23					
15	0	14	47	05	02	1	15	20	23	06	2	12	56	16	10	15	3	13	29	34	14	4	13	03	44	18	5	13	37	03	23					
16	0	15	46	13	02	1	16	19	31	06	2	13	55	25	10	16	3	14	28	43	14	4	14	02	53	19	5	14	36	11	23					
17	0	16	45	22	02	1	17	18	40	07	2	14	54	33	10	17	3	15	27	51	15	4	15	02	01	19	5	15	35	19	23					
18	0	17	44	30	02	1	18	17	48	07	2	15	53	41	11	18	3	16	27	00	15	4	16	01	09	19	5	16	34	28	23					
19	0	18	43	38	03	1	19	16	56	07	2	16	52	50	11	19	3	17	26	08	15	4	17	00	18	19	5	17	33	36	23					
20	0	19	42	47	03	1	20	16	04	07	2	17	51	58	11	20	3	18	25	16	15	4	17	59	26	19	5	18	32	41	23					
21	0	20	41	55	03	1	21	15	13	07	2	18	51	06	11	21	3	19	24	24	15	4	18	58	34	19	5	19	31	53	24					
22	0	21	41	03	03	1	22	14	21	07	2	19	50	15	11	22	3	20	23	33	15	4	19	57	42	19	5	20	31	01	24					
23	0	22	40	12	03	1	23	13	30	07	2	20	49	23	11	23	3	21	22	41	15	4	20	56	51	20	5	21	30	09	24					
24	0	23	39	20	03	1	24	12	38	08	2	21	48	31	11	24	3	22	21	49	16	4	21	55	59	20	5	22	29	18	24					
25	0	24	38	28	03	1	25	11	46	08	2	22	47	40	11	25	3	23	20	58	16	4	22	55	08	20	5	23	28	26	24					
26	0	25	37	37	04	1	26	10	55	08	2	23	46	48	12	26	3	24	20	06	16	4	23	54	16	20	5	24	27	34	24					
27	0	26	36	45	04	1	27	10	03	08	2	24	45	56	12	27	3	25	19	14	16	4	24	53	24	20	5	25	26	43	24					
28	0	27	35	53	04	1	28	09	11	08	2	25	45	05	12	28	3	25	18	23	16	4	25	52	33	20	5	26	25	51	24					
29	0	28	35	02	04						2	26	44	13	12	29	3	28	17	31	16	4	26	51	41	20	5	27	24	59	25					
30	0	29	34	10	04						2	27	43	21	12	30	3	27	16	39	16	4	27	50	49	21	5	28	24	08	25					
31	0	00	33	18	04						2	28	42	30	12	31						4	28	49	58	21										

TABLE of the mean Motions of the Earth for every Day of the Year.

JULY.						AUGUST.						SEPTEMBER.						OCTOBER.						NOVEMBER.						DECEMBER.					
Days	Mean Motion of the Earth.					M. P.	Days	Mean Motion of the Earth.					M. P.	Days	Mean Motion of the Earth.					M. P.	Days	Mean Motion of the Earth.					M. P.	Days	Mean Motion of the Earth.					M. P.	
"	s	o	'	"		"	s	o	'	"		"	s	o	'	"		"	s	o	'	"		"	s	o	'	"		"	s	o	'	"	
1	5	29	23	16		25	6	29	56	31	29	3	00	29	52	33		1	9	00	04	02	38	10	00	37	20	42	11	00	11	30	42		
2	6	00	22	24		25	7	00	55	42	29	8	01	29	01	34		2	9	01	03	10	38	10	01	36	29	42	11	01	10	38	42		
3	6	01	21	32		25	7	01	54	51	29	8	02	28	09	34		3	9	02	02	19	38	10	02	35	37	42	11	02	09	47	42		
4	6	02	20	40		25	7	02	53	59	30	8	03	27	17	34		4	9	03	01	27	38	10	03	34	45	42	11	03	08	55	42		
5	6	03	19	49		25	7	03	53	07	30	8	04	26	36	34		5	9	04	00	35	38	10	04	33	54	42	11	04	08	03	42		
6	6	04	18	57		26	7	04	52	16	30	8	05	25	31	34		6	9	04	59	44	38	10	05	33	02	42	11	05	07	12	42		
7	6	05	18	06		26	7	05	51	24	30	8	06	24	42	34		7	9	05	58	52	38	10	06	32	10	43	11	06	06	20	42		
8	6	06	17	14		26	7	06	50	32	30	8	07	23	51	34		8	9	06	58	00	38	10	07	31	19	43	11	07	05	28	42		
9	6	07	16	22		26	7	07	49	41	30	8	08	22	59	35		9	9	07	57	08	39	10	08	30	27	43	11	08	04	37	42		
10	6	08	15	31		25	7	08	48	49	30	8	09	22	07	35		10	9	08	56	17	39	10	09	29	35	43	11	09	03	45	42		
11	6	09	14	39		26	7	09	47	57	31	8	10	21	16	35		11	9	09	55	25	39	10	10	28	41	43	11	10	02	53	42		
12	6	10	13	47		26	7	10	47	06	31	8	11	20	24	35		12	9	10	54	34	39	10	11	27	52	43	11	11	02	02	42		
13	6	11	12	56		27	7	11	46	14	31	8	12	19	32	35		13	9	11	53	42	39	10	12	27	00	43	11	12	01	10	42		
14	6	12	12	04		27	7	12	45	22	31	8	13	18	41	35		14	9	12	52	50	39	10	13	26	09	44	11	13	00	18	42		
15	6	13	11	12		27	7	13	44	31	31	8	14	17	49	35		15	9	13	51	59	39	10	14	25	17	44	11	13	59	27	42		
16	6	14	10	21		27	7	14	43	39	31	8	15	16	57	36		16	9	14	51	07	40	10	15	24	25	44	11	14	58	35	42		
17	6	15	09	29		27	7	15	42	47	31	8	16	16	05	36		17	9	15	50	15	40	10	16	23	34	44	11	15	57	03	42		
18	6	16	08	37		27	7	16	42	56	31	8	17	15	14	36		18	9	16	49	24	40	10	17	22	42	44	11	16	56	52	42		
19	6	17	07	46		27	7	17	41	04	32	8	18	14	22	36		19	9	17	48	32	40	10	18	21	50	44	11	17	56	00	42		
20	6	18	06	54		28	7	18	40	12	32	8	19	13	30	36		20	9	18	47	40	40	10	19	20	59	44	11	18	55	08	42		
21	6	19	05	02		28	7	19	39	21	32	8	20	12	39	36		21	9	19	46	49	40	10	20	20	07	44	11	19	54	17	49		
22	6	20	05	11		28	7	20	38	25	32	8	21	11	47	36		22	9	20	45	54	40	10	21	19	15	45	11	20	53	25	49		
23	6	21	04	19		28	7	21	37	37	32	8	22	10	55	36		23	9	21	45	05	41	10	22	18	24	45	11	21	52	33	49		
24	6	22	03	27		28	7	22	36	46	32	8	23	10	04	37		24	9	22	44	14	41	10	23	17	32	45	11	22	51	42	49		
25	6	23	02	36		28	7	23	35	54	32	8	24	09	12	37		25	9	23	43	22	41	10	24	16	40	45	11	23	50	50	49		
26	6	24	01	44		28	7	24	35	02	33	8	25	08	20	37		26	9	24	42	30	41	10	25	15	49	45	11	24	49	58	49		
27	6	25	00	52		28	7	25	34	11	33	8	26	07	29	37		27	9	25	41	39	41	10	26	14	57	45	11	25	49	07	49		
28	6	26	00	01		29	7	26	33	19	33	8	27	06	37	37		28	9	26	40	47	41	10	27	14	05	45	11	26	48	15	49		
29	6	26	59	09		29	7	27	32	27	33	8	28	05	45	37		29	9	27	39	55	41	10	28	13	13	46	11	27	47	23	50		
30	6	27	58	17		29	7	28	31	36	33	8	29	04	54	37		30	9	28	39	04	41	10	29	12	22	46	11	28	46	32	50		
31	6	28	57	26		29	7	29	30	44	33							31	9	29	38	12	42						11	29	45	40	50		

A TABLE of the Horary mean Motion
of the Earth.

H.	0	1	11
1	1	11	111
11	11	111	1111
—	—	—	—
C	0	00	000
1	0	02	25
2	0	04	50
3	0	07	24
4	0	09	51
5	0	12	10
6	0	14	47
7	0	17	15
8	0	19	43
9	0	22	11
10	0	24	38
11	0	27	06
12	0	29	34
13	0	32	02
14	0	34	32
15	0	37	50
16	0	39	25
17	0	41	53
18	0	44	21
19	0	46	49
20	0	49	17
21	0	51	15
22	0	51	13
23	0	56	40
24	0	59	08
25	1	01	36
26	1	04	04
27	1	06	32
28	1	09	00
29	1	11	27
30	1	13	55

In the Dis-
ficult Year,
after Fed-er-
al aid, you...
...and they,
...the Al-
...of a
...to the
...given.

Equation of the Terrestrial Orbit.
Subtract.

	Sign, 0				1		2		3		4		5										
	0	1	11	00	0	56	56	1	39	28	1	56	20	1		41	34	0	59	02	30		
1	0	01	58	0	58	39	1	40	28	1	56	20	1	40	33	0	57	14	29	29			
2	0	03	57	1	00	21	1	41	27	1	56	20	1	39	30	0	55	26	28	28			
3	0	05	56	1	02	03	1	42	24	1	56	17	1	38	26	0	53	37	27	27			
4	0	07	55	1	03	43	1	43	21	1	56	13	1	37	20	0	51	47	26	26			
5	0	09	54	1	05	22	1	44	15	1	56	04	1	36	11	0	49	55	25	25			
6	0	11	53	1	07	00	1	45	08	1	55	54	1	35	01	0	48	03	24	24			
7	0	13	51	1	08	37	1	45	58	1	55	42	1	33	49	0	46	10	23	23			
8	0	15	48	1	10	13	1	46	47	1	55	28	1	32	30	0	44	16	22	22			
9	0	17	46	1	11	45	1	47	33	1	55	12	1	31	20	0	42	21	21	21			
10	0	19	44	1	13	22	1	48	19	1	55	53	1	30	03	0	40	26	20	20			
11	0	21	40	1	14	53	1	49	01	1	54	32	1	28	45	0	38	30	19	19			
12	0	23	36	1	16	24	1	49	42	1	54	10	1	27	25	0	36	32	18	18			
13	0	25	33	1	17	53	1	50	22	1	53	46	1	26	04	0	34	34	17	17			
14	0	27	29	1	19	22	1	50	59	1	53	19	1	24	39	0	32	36	16	16			
15	0	29	24	1	20	49	1	51	34	1	52	15	1	23	14	0	30	36	15	15			
16	0	31	19	1	22	14	1	52	07	1	52	19	1	21	47	0	28	37	14	14			
17	0	33	13	1	23	38	1	52	38	1	51	40	1	20	19	0	26	37	13	13			
18	0	35	07	1	25	00	1	53	08	1	51	11	1	18	43	0	24	36	12	12			
19	0	37	01	1	26	22	1	53	38	1	50	35	1	17	17	0	22	34	11	11			
20	0	38	54	1	27	42	1	54	00	1	49	56	1	15	41	0	20	32	10	10			
21	0	40	44	1	28	51	1	54	23	1	49	14	1	14	10	0	18	30	9	9			
22	0	42	35	1	30	04	1	54	44	1	48	37	1	12	34	0	16	28	8	8			
23	0	44	26	1	31	29	1	55	03	1	47	41	1	10	57	0	14	26	7	7			
24	0	46	16	1	32	42	1	55	21	1	46	59	1	09	19	0	12	24	6	6			
25	0	48	05	1	33	54	1	55	35	1	45	10	1	07	39	0	10	19	5	5			
26	0	49	52	1	35	0	1	55	48	1	45	20	1	05	55	0	08	16	4	4			
27	0	51	40	1	36	12	1	55	59	1	44	26	1	04	16	0	06	12	3	3			
28	0	53	26	1	37	19	1	56	09	1	43	31	1	02	32	0	04	03	2	2			
29	0	55	11	1	38	24	1	56	15	1	42	31	1	00	46	0	02	04	1	1			
30	0	56	56	1	39	21	1	56	20	1	41	35	1	59	03	0	00	00	0	0			
Sign 11				10				9				8				7				6			

TABLE of the mean Motion of the Moon, and of the Apogæum and Node.

Years of the Christian Era.	Motion of the Moon from the Vernal Equinox.				Motion of the Apogæe from the Vernal Equinox.				Motion of the Node from the Vernal Equinox.			
	s	o	'	"	s	o	'	"	s	o	'	"
1	4	02	02	45	9	12	07	05	08	28	36	04
1501	1	29	39	08	3	29	55	50	01	25	46	43
1581	7	23	55	20	4	15	16	50	10	08	25	47
1601	0	07	29	25	7	19	07	05	09	11	35	31
21	4	21	03	30	10	22	57	20	08	14	45	19
41	9	04	37	35	01	26	47	35	07	17	55	03
61	1	18	11	40	05	00	37	50	06	21	04	47
81	6	01	45	45	08	04	28	05	05	24	14	35
1701	10	15	19	50	11	08	18	20	04	27	24	20
1721	02	28	53	55	02	12	08	06	04	00	34	06
1741	07	12	28	00	05	15	59	21	03	03	43	51
1761	11	26	02	05	08	19	42	36	02	06	53	35
1781	04	09	36	10	11	23	39	51	01	10	03	20
1801	08	23	10	15	02	27	30	06	00	13	13	04

TABLE of the mean Motion of the Moon.

Years ex- pand.	Mean Motion of the Moon.				Mean Motion of the Apogæum.				Mean Motion of the Node.			
	s	o	'	"	s	o	'	"	s	o	'	"
1	04	09	23	4	01	10	39	51	00	19	59	43
2	08	18	46	7	02	20	19	41	01	08	39	26
3	00	28	09	10	04	01	59	32	01	27	59	09
4	05	20	42	49	05	12	46	04	02	17	22	03
5	10	00	05	52	06	23	25	54	03	06	41	46
6	02	09	28	55	08	04	05	44	03	06	01	29
7	06	18	51	59	09	14	45	35	04	15	21	12
8	11	11	25	37	10	25	32	07	05	04	44	05
9	03	20	48	41	00	06	11	57	05	24	03	49
10	08	00	11	44	01	16	51	47	06	13	23	33
11	00	09	34	48	02	27	31	38	07	02	43	16
12	05	02	18	27	04	08	18	10	07	22	06	09
13	09	11	31	30	05	18	58	00	08	11	25	52
14	01	20	54	34	06	29	37	50	09	00	45	35
15	06	00	17	37	08	10	17	41	09	20	05	18
16	10	22	51	16	09	21	04	13	10	09	28	12
17	03	02	14	19	11	01	44	03	10	28	47	56
18	07	11	37	22	00	12	23	53	11	18	07	39
19	11	21	00	26	01	23	03	44	00	07	27	22
20	04	13	34	05	03	03	50	15	00	26	50	15
40	08	27	08	10	06	07	40	30	01	23	40	31
60	01	10	42	15	09	11	30	45	02	20	30	46
80	05	24	16	20	00	15	21	00	03	17	21	02
100	10	07	50	25	03	19	11	15	04	14	11	17
200	08	15	40	50	07	08	22	30	08	28	22	33
300	06	23	31	15	10	27	33	45	01	12	33	50
400	05	01	21	40	02	16	45	00	05	26	45	07
500	03	09	12	05	06	05	56	15	10	10	56	23
600	01	25	07	30	09	25	07	30	02	25	07	40
700	11	14	18	55	01	14	18	45	07	09	18	57
800	10	03	30	20	05	03	30	00	11	23	30	13
900	08	22	41	45	08	22	41	15	04	07	41	30
1000	06	18	24	10	00	11	52	30	08	21	52	47
2000	01	06	48	20	00	23	45	00	05	13	45	44
3000	07	25	12	30	01	05	37	30	02	05	38	30
4000	02	13	36	40	01	17	30	00	10	27	31	27
5000	09	2	00	50	01	29	22	30	07	20	24	14

TABLE of the mean Motions of the Moon for every Day of the Year.

JANUARY.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	00	13	10	35	00	06	41	00	03	11
2	00	26	21	10	00	13	22	00	06	21
3	01	09	31	45	00	20	03	00	09	32
4	01	22	42	20	00	26	44	00	12	43
5	02	05	52	55	00	33	25	00	15	53
6	02	19	03	30	00	40	06	00	19	04
7	03	02	14	05	00	46	48	00	22	14
8	03	15	24	40	00	53	29	00	25	25
9	03	28	35	15	01	00	10	00	28	36
10	04	11	45	50	01	06	51	00	31	46
11	04	24	56	25	01	13	32	00	34	57
12	05	08	07	00	01	20	13	00	38	08
13	05	21	17	35	01	26	54	00	41	18
14	06	04	28	10	01	33	35	00	44	29
15	06	17	38	45	01	40	16	00	47	40
16	07	00	49	20	01	46	57	00	50	50
17	07	13	59	55	01	53	38	00	54	01
18	07	27	10	30	02	00	19	00	57	11
19	08	10	21	05	02	07	00	01	00	22
20	08	23	31	40	02	13	41	01	03	33
21	09	06	42	15	02	20	23	01	06	43
22	09	19	52	50	02	27	04	01	09	54
23	10	03	03	25	02	33	45	01	13	05
24	10	16	14	00	02	40	26	01	16	15
25	10	29	24	35	02	47	07	01	19	26
26	11	12	35	10	02	53	48	01	22	37
27	11	25	45	45	03	00	29	01	25	47
28	00	08	56	20	03	07	10	01	28	58
29	00	22	06	55	03	13	51	01	32	09
30	01	05	17	31	03	20	32	01	35	19
31	01	18	28	06	03	27	13	01	38	30

FEBRUARY.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	02	01	38	41	03	33	54	01	41	40
2	02	14	49	16	03	40	35	01	44	50
3	02	27	59	51	03	47	16	01	48	01
4	03	11	10	26	03	53	57	01	51	12
5	03	24	21	01	04	00	38	01	54	23
6	04	07	31	36	04	07	19	01	57	33
7	04	20	42	11	04	14	00	02	00	44
8	05	03	52	46	04	20	41	02	03	54
9	05	17	03	21	04	27	22	02	07	06
10	06	00	13	56	04	34	04	02	10	16
11	06	13	24	31	04	40	45	02	15	27
12	06	26	35	06	04	47	26	02	16	37
13	07	09	45	41	04	54	07	02	19	48
14	07	22	56	15	05	00	48	02	22	59
15	08	06	06	50	05	07	29	02	26	09
16	08	19	17	26	05	14	10	02	29	20
17	09	02	28	01	05	20	51	02	32	30
18	09	15	38	36	05	27	32	02	35	41
19	09	28	49	11	05	34	13	02	38	52
20	10	11	59	46	05	40	54	02	42	02
21	10	25	10	21	05	47	36	02	45	13
22	11	08	20	56	05	54	17	02	48	23
23	11	21	31	31	06	00	58	02	51	34
24	00	04	42	06	06	07	39	02	54	45
25	00	17	52	41	06	14	20	02	57	55
26	01	01	03	16	06	21	01	03	01	06
27	01	14	13	51	06	27	42	03	04	16
28	01	27	24	26	06	34	23	03	07	27

TABLE of the mean Motions of the Moon for every Day in the Year.

MARCH.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	02	10	35	01	06	41	04	03	10	38
2	02	23	45	36	06	47	45	03	13	49
3	03	06	56	11	06	54	26	03	16	59
4	03	20	06	46	07	01	07	03	20	10
5	04	03	17	21	07	07	48	03	23	20
6	04	16	27	56	07	14	29	03	26	31
7	04	29	38	31	07	21	11	03	29	42
8	05	12	49	06	07	27	52	03	32	52
9	05	25	59	41	07	34	33	03	36	03
10	06	09	10	16	07	41	14	03	39	14
11	06	22	20	51	07	47	55	03	42	25
12	07	05	31	26	07	54	36	03	45	36
13	07	18	42	01	08	01	17	03	48	46
14	08	01	52	36	08	07	58	03	51	56
15	08	15	03	11	08	14	39	03	55	07
16	08	28	13	46	08	21	20	03	58	18
17	09	11	24	21	08	28	01	04	01	28
18	09	24	34	56	08	34	42	04	04	39
19	10	07	45	31	08	41	23	04	07	49
20	10	20	56	07	08	48	04	04	11	00
21	11	04	06	42	08	54	45	04	14	11
22	11	17	17	17	09	01	27	04	17	22
23	00	00	27	52	09	08	08	04	20	32
24	00	13	38	27	09	14	49	04	23	43
25	00	26	49	02	09	21	30	04	26	53
26	01	09	59	37	09	28	11	04	30	04
27	01	23	10	12	09	34	52	04	33	15
28	02	06	20	47	09	41	33	04	36	25
29	02	19	31	22	09	48	14	04	39	36
30	03	02	41	57	09	54	55	04	42	47
31	03	15	52	32	10	01	36	04	45	58

APRIL.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	03	29	03	07	10	08	17	04	49	08
2	04	12	13	42	10	14	58	04	52	19
3	04	25	24	17	10	21	39	04	55	29
4	05	08	34	52	10	28	20	04	58	40
5	05	21	45	27	10	35	02	05	01	51
6	06	04	56	02	10	41	43	05	05	01
7	06	18	06	38	10	48	24	05	08	12
8	07	01	17	12	10	55	05	05	11	22
9	07	14	27	47	11	01	46	05	14	33
10	07	27	38	22	11	08	27	05	17	44
11	08	10	48	57	11	15	08	05	20	54
12	08	23	59	32	11	21	49	05	24	05
13	09	07	10	07	11	28	30	05	27	16
14	09	20	20	42	11	35	11	05	30	26
15	10	03	31	17	11	41	52	05	33	37
16	10	16	41	52	11	48	33	05	36	48
17	10	29	52	27	11	55	14	05	39	58
18	11	13	03	02	12	01	55	05	43	09
19	11	26	13	37	12	08	36	05	46	19
20	00	09	24	12	12	15	18	05	49	31
21	00	22	34	47	12	21	59	05	52	41
22	01	05	45	22	12	28	40	05	55	52
23	01	18	55	57	12	35	21	05	59	02
24	02	02	06	37	12	42	02	06	02	13
25	02	15	17	07	12	48	43	06	05	24
26	02	28	27	42	12	55	24	06	08	34
27	03	11	38	17	13	02	05	06	11	45
28	03	24	48	52	13	08	46	06	14	56
29	04	07	59	27	13	15	27	06	18	06
30	04	21	10	03	13	22	08	06	21	17

MAY.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	05	04	20	37	13	28	49	06	24	27
2	05	17	31	12	13	35	30	06	27	38
3	06	00	41	47	13	42	11	06	30	48
4	06	13	52	22	13	48	52	06	33	59
5	06	27	02	57	13	55	34	06	37	10
6	07	10	13	32	14	02	15	06	40	20
7	07	23	24	07	14	08	56	06	43	31
8	08	06	34	42	14	15	37	06	46	41
9	08	19	45	17	14	22	18	06	49	52
10	09	02	55	53	14	28	59	06	53	03
11	09	16	06	27	14	35	40	06	56	14
12	09	29	17	03	14	42	21	06	59	24
13	10	12	27	38	14	49	02	07	02	34
14	10	25	38	13	14	55	43	07	05	45
15	11	08	48	48	15	02	24	07	08	56
16	11	21	59	23	15	09	05	07	12	06
17	00	05	09	58	15	15	46	07	15	17
18	00	18	20	33	15	22	28	07	18	27
19	01	01	31	08	15	29	09	07	21	38
20	01	14	41	43	15	35	50	07	24	49
21	01	27	52	18	15	42	31	07	28	00
22	02	11	02	53	15	49	12	07	31	10
23	02	24	13	28	15	55	53	07	34	21
24	03	07	24	03	16	02	34	07	37	32
25	03	20	34	38	16	09	15	07	40	43
26	04	03	45	13	16	15	56	07	43	53
27	04	16	55	48	16	22	37	07	47	04
28	05	00	06	23	16	29	18	07	50	14
29	05	13	16	58	16	35	59	07	53	25
30	05	26	27	33	16	42	40	07	56	36
31	06	09	38	08	16	49	21	07	59	46

JUNE.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	o	'	"	o	'	"	o	'	"
1	06	22	48	43	16	56	03	08	02	56
2	07	05	59	18	17	02	44	08	06	07
3	07	19	09	53	17	09	25	08	09	18
4	08	02	20	28	17	16	06	08	12	29
5	08	15	31	03	17	22	47	08	15	39
6	08	28	41	38	17	29	28	08	18	50
7	09	11	52	13	17	36	09	08	22	00
8	09	25	02	48	17	42	50	08	25	11
9	10	08	13	23	17	49	31	08	28	22
10	10	21	23	58	17	56	12	08	31	32
11	11	04	34	33	18	02	53	08	34	43
12	11	17	45	08	18	09	34	08	37	54
13	00	00	55	43	18	16	15	08	41	05
14	00	14	06	18	18	22	56	08	44	16
15	00	27	16	53	18	29	37	08	47	26
16	01	10	27	28	18	36	19	08	50	37
17	01	23	38	03	18	43	00	08	53	47
18	02	06	48	38	18	49	41	08	56	58
19	02	19	59	13	18	56	22	09	00	09
20	03	03	09	48	19	03	03	09	03	19
21	03	16	20	23	19	09	44	09	06	30
22	03	29	30	58	19	16	25	09	09	40
23	04	12	41	33	19	23	06	09	12	51
24	04	25	52	08	19	29	47	09	16	02
25	05	09	02	43	19	36	28	09	19	12
26	05	22	13	18	19	43	09	09	22	23
27	06	05	23	53	19	49	50	09	25	34
28	06	18	34	28	19	56	31	09	28	45
29	07	01	45	04	20	03	12	09	31	55
30	07	14	55	39	20	09	54	09	35	06

TABLE of the mean Motions of the Moon for every Day of the Year.

JULY.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	°	'	"	°	'	"	°	'	"
1	07	27	06	14	20	16	35	09	38	16
2	08	11	16	49	20	23	16	09	41	27
3	08	24	27	24	20	29	57	09	44	37
4	09	07	37	59	20	36	38	09	47	48
5	09	20	48	34	20	43	19	09	50	19
6	10	03	59	09	20	50	00	09	54	09
7	10	17	09	44	20	56	41	09	57	20
8	11	00	20	19	21	03	22	10	00	30
9	11	13	30	54	21	10	03	10	03	41
10	11	26	41	29	21	16	44	10	06	51
11	00	09	52	04	21	23	25	10	10	02
12	00	23	02	39	21	30	06	10	13	13
13	01	06	13	14	21	36	47	10	16	24
14	01	19	23	49	21	43	28	10	19	35
15	02	02	34	24	21	50	09	10	22	45
16	02	15	44	59	21	56	52	10	25	56
17	02	28	55	34	22	03	32	10	29	06
18	03	12	06	09	22	10	13	10	32	17
19	03	25	16	44	22	16	54	10	35	28
20	04	08	27	19	22	23	35	10	38	39
21	04	21	37	54	22	30	15	10	41	49
22	05	04	48	29	22	36	56	10	45	00
23	05	17	59	04	22	43	37	10	48	11
24	06	10	09	39	22	50	19	10	51	21
25	06	14	20	14	22	57	00	10	54	32
26	06	27	30	49	23	03	41	10	57	42
27	07	10	41	20	23	10	22	11	00	53
28	07	23	51	59	23	17	03	11	04	03
29	08	07	02	34	23	23	44	11	07	14
30	08	20	13	09	23	30	25	11	10	25
31	09	03	23	44	23	37	06	11	13	36

AUGUST.

Days	Mean Motion of the Moon.				Apog.			Nod. Retrog.		
	s	°	'	"	°	'	"	°	'	"
1	09	16	34	19	23	43	47	11	16	47
2	09	29	44	54	23	50	28	11	19	58
3	10	12	55	29	23	57	09	11	23	08
4	10	26	06	04	24	03	51	11	26	19
5	11	09	16	39	24	10	32	11	29	29
6	11	22	27	14	24	17	13	11	32	40
7	00	05	37	49	24	23	54	11	35	51
8	00	18	48	24	24	30	35	11	39	02
9	01	01	58	59	24	37	16	11	42	12
10	01	15	09	34	24	43	57	11	45	23
11	01	28	20	09	24	50	38	11	48	33
12	02	11	30	44	24	57	19	11	51	44
13	02	24	41	19	25	04	00	11	54	54
14	03	07	51	54	25	10	42	11	58	05
15	03	21	02	29	25	17	23	12	01	15
16	04	04	13	04	25	24	04	12	04	26
17	04	17	23	40	25	30	45	12	07	36
18	05	00	34	15	25	37	26	12	10	47
19	05	13	44	50	25	44	07	12	13	58
20	05	26	55	25	25	50	48	12	17	08
21	06	10	06	00	25	57	29	12	20	19
22	06	23	16	35	26	04	10	12	23	29
23	07	06	27	10	26	10	51	12	26	40
24	07	19	37	45	26	17	32	12	29	51
25	08	02	48	20	26	24	13	12	33	01
26	08	15	58	55	26	30	55	12	36	12
27	08	29	09	30	26	37	36	12	39	23
28	09	12	20	05	26	44	17	12	42	34
29	09	25	30	40	26	50	58	12	45	44
30	10	08	41	15	26	57	39	12	48	55
31	10	21	51	50	27	04	20	12	52	05

SEPTEMBER.

Days	Mean Motion of the Moon.				Apog.				Nod. Retrog.		
	s	°	'	"	s	°	'	"	°	'	"
1	11	05	02	25	00	27	11	01	12	55	16
2	11	18	13	00	00	27	17	42	12	58	27
3	00	01	23	35	00	27	24	23	13	01	37
4	00	14	34	10	00	27	31	04	13	04	48
5	00	27	44	45	00	27	37	45	13	07	58
6	01	10	55	20	00	27	44	26	13	11	09
7	01	24	05	55	00	27	51	07	13	14	20
8	02	07	16	30	00	27	57	48	13	17	31
9	02	20	27	05	00	28	04	29	13	20	41
10	03	03	37	40	00	28	11	11	13	23	52
11	03	16	48	15	00	28	17	52	13	27	03
12	03	28	58	50	00	28	24	33	13	30	14
13	04	13	09	25	00	28	31	14	13	33	24
14	04	26	20	00	00	28	37	55	13	36	35
15	05	09	30	35	00	28	44	36	13	39	45
16	05	22	41	10	00	28	51	17	13	42	56
17	06	05	51	45	00	28	57	58	13	46	07
18	06	19	02	20	00	29	04	39	13	49	17
19	07	02	12	55	00	29	11	20	13	52	28
20	07	15	23	30	00	29	18	01	13	55	38
21	07	28	34	05	00	29	24	42	13	58	49
22	08	11	44	40	00	29	31	23	14	02	00
23	08	24	55	15	00	29	38	04	14	05	10
24	09	08	05	50	00	29	44	45	14	08	21
25	09	21	16	25	00	29	51	27	14	11	31
26	10	04	27	00	00	29	58	08	14	14	42
27	10	17	37	35	01	00	04	49	14	17	53
28	11	00	48	10	01	00	11	30	14	21	03
29	11	13	58	45	01	00	18	11	14	24	14
30	11	27	09	20	01	00	24	52	14	27	24

OCTOBER.

Days	Mean Motion of the Moon.				Apog.				Nod. Retrog.		
	s	°	'	"	s	°	'	"	°	'	"
1	00	10	19	55	01	00	31	37	14	30	35
2	00	23	30	30	01	00	38	14	14	33	46
3	01	06	41	05	01	00	44	55	14	36	56
4	01	19	51	40	01	00	51	36	14	40	07
5	02	03	02	15	01	00	58	17	14	43	17
6	02	16	12	50	01	01	04	58	14	46	28
7	02	29	23	26	01	01	11	39	14	49	39
8	03	12	34	01	01	01	18	20	14	52	50
9	03	25	44	36	01	01	25	02	14	56	00
10	04	08	55	11	01	01	31	43	14	59	11
11	04	22	05	46	01	01	38	24	15	02	21
12	05	05	16	21	01	01	45	05	15	05	32
13	05	18	26	56	01	01	51	46	15	08	43
14	06	01	37	36	01	01	58	27	15	11	53
15	06	14	48	06	01	02	05	08	15	15	04
16	06	27	58	41	01	02	11	49	15	18	15
17	07	11	09	16	01	02	18	30	15	21	26
18	07	24	19	51	01	02	25	11	15	24	36
19	08	07	30	21	01	02	31	52	15	27	47
20	08	20	41	01	01	02	38	33	15	30	57
21	09	03	51	36	01	02	45	14	15	34	08
22	09	17	02	11	01	02	51	55	15	37	19
23	10	00	12	46	01	03	58	36	15	40	29
24	10	13	23	21	01	03	05	17	15	43	40
25	10	26	33	56	01	03	11	58	15	46	50
26	11	09	44	31	01	03	18	39	15	50	01
27	11	22	55	06	01	03	25	21	15	53	12
28	00	06	05	41	01	03	32	02	15	56	22
29	00	19	16	16	01	03	38	43	15	59	33
30	01	02	26	51	01	03	45	24	16	02	43
31	01	15	37	26	01	03	52	05	16	05	54

TABLE of the mean Motions of the Moon for every Day in the Year.

NOVEMBER.

Days	Mean Motion of the Moon.				Apog.				Nod. Retrog.		
	s	o	'	"	s	o	'	"	o	'	"
1	01	28	48	01	01	03	58	46	16	09	05
2	02	11	59	36	01	04	05	27	16	12	16
3	02	25	09	11	01	04	12	08	16	15	26
4	03	08	19	46	01	04	18	49	16	18	37
5	03	21	30	21	01	04	25	30	16	21	48
6	04	04	40	56	01	04	32	11	16	24	59
7	04	17	51	31	01	04	38	53	16	28	09
8	05	01	02	06	01	04	45	34	16	31	20
9	05	14	12	41	01	04	52	15	16	34	30
10	05	27	23	16	01	04	58	56	16	37	41
11	06	10	33	51	01	05	05	37	16	40	52
12	06	23	44	26	01	05	12	10	16	44	02
13	07	06	55	01	01	05	18	59	16	47	13
14	07	20	05	36	01	05	25	40	16	50	23
15	08	03	16	11	01	05	32	21	16	53	34
16	08	16	26	46	01	05	39	02	16	56	45
17	08	29	37	21	01	05	45	43	16	59	55
18	09	12	47	56	01	05	52	24	17	03	06
19	09	25	58	31	01	05	59	05	17	06	16
20	10	09	09	06	01	06	05	46	17	09	27
21	10	22	19	41	01	06	12	27	17	12	38
22	11	05	30	16	01	06	19	09	17	15	49
23	11	18	40	51	01	06	25	50	17	18	59
24	00	01	51	26	01	06	32	31	17	22	10
25	00	15	02	02	01	06	39	12	17	25	21
26	00	28	12	37	01	06	45	53	17	28	32
27	01	11	23	12	01	06	52	34	17	31	42
28	01	24	33	47	01	06	59	15	17	34	53
29	02	07	44	22	01	07	05	56	17	38	03
30	02	20	54	57	01	07	12	37	17	41	14

DECEMBER.

Days	Mean Motion of the Moon.				Apog.				Nod. Retrog.		
	s	o	'	"	s	o	'	"	o	'	"
1	03	04	05	32	01	07	19	18	17	44	25
2	03	17	16	07	01	07	25	59	17	47	35
3	04	00	26	42	01	07	32	40	17	50	46
4	04	13	37	17	01	07	39	21	17	53	56
5	04	26	47	52	01	07	46	02	17	57	07
6	05	09	58	27	01	07	52	43	18	00	18
7	05	23	09	02	01	07	59	24	18	03	28
8	06	06	19	37	01	08	06	06	18	06	39
9	06	19	30	12	01	08	12	47	18	09	49
10	07	02	40	47	01	08	19	28	18	13	00
11	07	15	51	22	01	08	26	09	18	16	11
12	07	29	01	57	01	08	32	50	18	19	21
13	08	12	12	32	01	08	39	31	13	22	32
14	08	25	23	07	01	08	46	12	18	25	42
15	09	08	33	42	01	08	52	53	18	28	53
16	09	21	44	17	01	08	59	34	18	32	04
17	10	04	54	52	01	09	06	15	18	35	15
18	10	18	05	27	01	09	12	56	18	38	25
19	11	01	16	02	01	09	19	38	18	41	36
20	11	14	26	37	01	09	26	19	18	44	47
21	11	27	37	12	01	09	33	00	18	47	58
22	12	10	47	47	01	09	39	41	18	51	09
23	00	23	58	22	01	09	46	22	18	54	19
24	01	07	08	57	01	09	53	03	18	57	30
25	01	20	19	32	01	09	59	44	19	00	41
26	02	03	30	07	01	10	06	25	19	03	51
27	02	16	40	42	01	10	13	06	19	07	02
28	02	29	51	17	01	10	19	47	19	10	12
29	03	13	01	52	01	10	26	28	19	13	23
30	03	26	12	27	01	10	33	09	19	16	34
31	04	09	23	02	01	10	39	50	19	19	45

A Table of the mean Motion of the Moon by Hours, and Parts of an Hour.

H	o	'	"	'''	''''	'''''	H	o	'	"	'''	''''	'''''
0	0	00	00	0	00	0	30	16	28	14	8	21	3
1	0	32	56	0	17	0	31	17	01	10	8	38	4
2	1	05	53	0	33	0	32	17	34	07	8	54	4
3	1	38	49	0	50	0	33	18	07	03	9	11	4
4	2	11	46	1	07	0	34	18	39	59	9	28	4
5	2	44	42	1	24	0	35	19	12	55	9	45	4
6	3	17	39	1	40	0	36	19	45	52	10	02	4
7	3	50	35	1	57	0	37	20	18	48	10	19	4
8	4	23	32	2	14	1	38	20	51	45	10	36	5
9	4	56	28	2	30	1	39	21	24	41	10	52	5
10	5	29	25	2	47	1	40	21	57	38	11	08	5
11	6	02	21	3	04	1	41	22	30	34	11	25	5
12	6	35	18	3	21	1	42	23	03	31	11	42	5
13	7	08	14	3	37	1	43	23	36	27	11	59	5
14	7	41	10	3	54	1	44	24	09	24	12	16	5
15	8	14	07	4	11	1	45	24	42	20	12	32	5
16	8	47	03	4	27	2	46	25	15	17	12	41	6
17	9	20	00	4	44	2	47	25	48	13	13	05	6
18	9	52	56	5	01	2	48	26	21	10	13	22	6
19	10	25	53	5	18	2	49	26	54	06	13	39	6
20	10	58	49	5	34	2	50	27	27	03	13	56	6
21	11	31	46	5	51	2	51	27	59	59	14	13	6
22	12	04	42	6	08	2	52	28	39	56	14	30	6
23	12	37	39	6	24	3	53	29	05	52	14	40	7
24	13	10	35	6	41	3	54	29	38	49	15	02	7
25	13	43	32	6	58	3	55	30	11	45	15	19	7
26	14	16	28	7	15	3	56	30	44	42	15	36	7
27	14	49	24	7	31	3	57	31	17	38	15	53	7
28	15	22	21	7	48	3	58	31	50	34	16	10	7
29	15	55	17	8	05	3	59	32	23	31	16	26	7
30	16	28	14	8	21	3	60	32	56	27	16	43	7

In the Leap Year after February, add a Day to the Time given, and its Motion to the Motions collected.

Physical Parts to be added to, or subtracted from the mean Motion of the Moon, according to the mean Anomaly of the Sun.

Mean Ana. of the Sun.	Add.					
	0	1	2	3	4	5
0	0 00	5 36	9 51	11 30	10 04	5 51
1	0 12	5 47	9 57	11 30	9 58	5 40
2	0 23	5 58	10 03	11 30	9 51	5 30
3	0 35	6 09	10 09	11 30	9 45	5 19
4	0 47	6 19	10 14	11 29	9 39	5 08
5	0 59	6 29	10 19	11 28	9 32	4 57
6	1 10	6 39	10 25	11 27	9 25	4 46
7	1 22	6 48	10 30	11 26	9 18	4 35
8	1 33	6 58	10 34	11 25	9 11	4 23
9	1 45	7 07	10 39	11 24	9 03	4 12
10	1 56	7 16	10 43	11 22	8 55	4 00
11	2 08	7 25	10 48	11 20	8 48	3 49
12	2 19	7 34	10 52	11 18	8 40	3 37
13	2 31	7 43	10 56	11 15	8 32	3 25
14	2 42	7 52	10 59	11 13	8 23	3 14
15	2 54	8 01	11 02	11 10	8 15	3 02
16	3 05	8 09	11 06	11 07	8 06	2 50
17	3 16	8 17	11 09	11 04	7 58	2 38
18	3 27	8 25	11 12	11 00	7 49	2 26
19	3 39	8 33	11 14	10 57	7 40	2 14
20	3 50	8 41	11 17	10 53	7 30	2 02
21	4 01	8 49	11 19	10 50	7 21	1 50
22	4 12	8 57	11 21	10 45	7 12	1 38
23	4 22	9 04	11 23	10 40	7 02	1 26
24	4 33	9 11	11 24	10 35	6 52	1 13
25	4 44	9 18	11 26	10 31	6 42	1 01
26	4 55	9 25	11 27	10 26	6 32	0 49
27	5 05	9 32	11 28	10 20	6 22	0 37
28	5 16	9 38	11 29	10 15	6 12	0 24
29	5 26	9 45	11 29	10 09	6 02	0 12
30	5 36	9 51	11 30	10 04	5 51	0 00
31	5 47	9 58	11 31	10 00	5 40	0 00

Subtract

Equations of the Lunar Apogæum, and Eccentricities of the Orbit, in such Parts, as the Radius contains 100,000 of them.

TABLE of Equations of the Centre of the Moon.

Add the Equations of the Apogæum.									
Argum. of the Year.	Sign. 2.			Sign. 1.			Sign. 3.		
	Eccentricity.			Eccentricity.			Eccentricity.		
	Parts.	o	′	Parts.	o	′	Parts.	o	′
0	66854	09	07	61045	11	08	49429	30	
1	66847	09	20	60691	10	59	49082	29	
2	66826	09	34	60330	10	49	48741	28	
3	66791	09	46	59902	10	38	48408	27	
4	66741	09	58	59689	10	26	48085	26	
5	66678	10	10	59210	10	12	47769	25	
6	66600	10	21	58827	09	58	47653	24	
7	66509	10	31	58439	09	43	47167	23	
8	66404	10	41	58047	09	26	46880	22	
9	66286	10	51	57652	09	09	46604	21	
10	66154	10	59	57254	08	51	46337	20	
11	66008	11	07	56854	08	31	46082	19	
12	65850	11	15	56451	08	11	45838	18	
13	65679	11	21	56047	07	49	45606	17	
14	65495	11	27	55642	07	27	45385	16	
15	65298	11	32	55237	07	04	45176	15	
16	65089	11	37	54832	06	40	44979	14	
17	64868	11	30	54427	06	15	44794	13	
18	64636	11	43	54023	05	50	44623	12	
19	64392	11	45	53920	05	23	44466	11	
20	64137	11	47	53220	04	56	44320	10	
21	63870	11	47	52822	04	28	44188	9	
22	63504	11	46	52427	04	00	44070	8	
23	63307	11	45	52035	03	31	43965	7	
24	63011	11	43	51647	03	02	43874	6	
25	62705	11	39	51264	02	03	43796	5	
26	62389	11	35	50885	02	02	43733	4	
27	62066	11	30	50512	01	32	43683	3	
28	61733	11	24	50144	01	01	43648	2	
29	61392	11	17	49783	00	30	43627	1	
30	61045	11	08	49429	00	00	43619	0	
Sign. 2.			Sign. 1.			Sign. 3.			

Subtract the Equations of the Apogæum.

Subtract.									
Mean Anomaly.	Sign. 0.			Sign. 1.			Sign. 11.		
	Left.Ecc.			Left.Ecc.			Left.Ecc.		
	43619	55237	66854	43619	55237	66854	43619	55237	66854
0	00 00 00	00 00 00	00 00 00	2 23 08	2 59 04	3 34 08	00 00 00	00 00 00	00 00 00
1	00 04 58	00 06 12	00 07 24	2 27 32	3 04 33	3 40 43	00 04 58	00 06 12	00 07 24
2	00 09 56	00 12 24	00 14 48	2 31 50	3 10 00	3 47 15	00 09 56	00 12 24	00 14 48
3	00 14 53	00 18 35	00 22 12	2 36 07	3 15 23	3 53 43	00 14 53	00 18 35	00 22 12
4	00 19 50	00 24 47	00 29 30	2 40 22	3 20 44	4 00 08	00 19 50	00 24 47	00 29 30
5	00 24 48	00 30 58	00 30 58	2 44 35	3 26 01	4 06 30	00 24 48	00 30 58	00 30 58
6	00 29 44	00 37 09	00 44 20	2 48 48	3 31 16	4 12 47	00 29 44	00 37 09	00 44 20
7	00 34 39	00 43 19	00 51 42	2 52 53	3 36 27	4 19 01	00 34 39	00 43 19	00 51 42
8	00 39 34	00 49 27	00 59 04	2 56 54	3 41 35	4 25 12	00 39 34	00 49 27	00 59 04
9	00 44 30	00 55 36	01 06 25	3 00 58	3 46 39	4 31 18	00 44 30	00 55 36	01 06 25
10	00 49 25	01 01 43	01 13 45	3 04 55	3 51 39	4 37 20	00 49 25	01 01 43	01 13 45
11	00 54 19	01 07 51	01 21 02	3 08 53	3 56 36	4 43 18	00 54 19	01 07 51	01 21 02
12	00 59 13	01 13 57	01 28 18	3 12 46	4 01 30	4 49 12	00 59 13	01 13 57	01 28 18
13	01 04 04	01 20 02	01 35 34	3 16 35	4 06 20	4 55 01	01 04 04	01 20 02	01 35 34
14	01 08 50	01 26 05	01 42 40	3 20 22	4 11 06	5 00 46	01 08 50	01 26 05	01 42 40
15	01 13 45	01 32 07	01 50 02	3 24 05	4 15 47	5 06 26	01 13 45	01 32 07	01 50 02
16	01 18 33	01 38 08	01 57 13	3 27 44	4 20 24	5 12 01	01 18 33	01 38 08	01 57 13
17	01 23 20	01 44 08	02 04 23	3 31 20	4 24 58	5 17 32	01 23 20	01 44 08	02 04 23
18	01 28 06	01 50 06	02 11 31	3 34 53	4 29 28	5 22 59	01 28 06	01 50 06	02 11 31
19	01 32 50	01 56 02	02 18 57	3 38 22	4 33 53	5 28 20	01 32 50	01 56 02	02 18 57
20	01 37 33	01 01 56	02 25 41	3 41 47	4 38 14	5 33 36	01 37 33	01 01 56	02 25 41
21	01 42 15	02 07 49	02 32 43	3 45 09	4 42 31	5 38 17	01 42 15	02 07 49	02 32 43
22	01 46 55	02 13 39	02 39 4	3 48 28	4 46 43	5 43 50	01 46 55	02 13 39	02 39 4
23	01 51 3	02 19 27	02 46 40	3 51 43	4 50 50	5 48 58	01 51 3	02 19 27	02 46 40
24	01 56 01	02 25 14	02 53 35	3 54 55	4 54 53	5 53 48	01 56 01	02 25 14	02 53 35
25	02 00 4	02 30 58	03 00 28	3 58 03	4 58 55	5 58 38	02 00 4	02 30 58	03 00 28
26	02 05 11	02 36 41	03 07 18	4 01 06	5 02 43	6 03 21	02 05 11	02 36 41	03 07 18
27	02 09 40	02 42 21	03 14 05	4 04 05	5 06 32	6 07 59	02 09 40	02 42 21	03 14 05
28	02 14 18	02 47 58	03 20 49	4 07 00	5 10 15	6 12 31	02 14 18	02 47 58	03 20 49
29	02 18 4	02 53 32	03 27 30	4 09 51	5 13 54	6 16 58	02 18 4	02 53 32	03 27 30
30	02 23 08	02 59 04	03 34 08	4 12 40	5 17 27	6 21 18	02 23 08	02 59 04	03 34 08
Sign. 11.			Sign. 10.			Sign. 9.			

Add

Subtract.									
Mean Anomaly.	Sign. 2.			Sign. 3.			Sign. 10.		
	Left.Ecc.			Left.Ecc.			Left.Ecc.		
	43619	55237	66854	43619	55237	66854	43619	55237	66854
0	4 12 40	5 17 27	6 21 18	4 59 30	6 18 59	7 38 17	4 12 40	5 17 27	6 21 18
1	4 15 18	5 20 54	6 25 32	4 59 48	6 19 23	7 38 52	4 15 18	5 20 54	6 25 32
2	4 17 56	5 24 17	6 29 39	4 59 56	6 19 40	7 39 20	4 17 56	5 24 17	6 29 39
3	4 20 28	5 27 35	6 33 40	4 59 59	6 19 50	7 39 40	4 20 28	5 27 35	6 33 40
4	4 23 00	5 30 47	6 37 36	4 59 58	6 19 54	7 39 51	4 23 00	5 30 47	6 37 36
5	4 25 24	5 33 53	6 41 25	4 59 49	6 19 51	7 39 53	4 25 24	5 33 53	6 41 25
6	4 27 44	5 36 54	6 45 08	4 59 36	6 19 40	7 39 47	4 27 44	5 36 54	6 45 08
7	4 30 00	5 39 49	6 48 44	4 59 20	6 19 23	7 39 33	4 30 00	5 39 49	6 48 44
8	4 32 12	5 42 39	6 52 14	4 58 53	6 18 57	7 39 09	4 32 12	5 42 39	6 52 14
9	4 34 19	5 45 24	6 55 36	4 58 24	6 18 25	7 38 37	4 34 19	5 45 24	6 55 36
10	4 36 21	5 48 02	6 58 52	4 57 48	6 17 40	7 37 58	4 36 21	5 48 02	6 58 52
11	4 38 18	5 50 35	7 02 01	4 57 06	6 17 00	7 37 09	4 38 18	5 50 35	7 02 01
12	4 40 12	5 53 02	7 05 03	4 56 19	6 16 08	7 36 12	4 40 12	5 53 02	7 05 03
13	4 41 58	5 55 22	7 07 57	4 55 27	6 15 08	7 35 06	4 41 58	5 55 22	7 07 57
14	4 43 41	5 57 36	7 10 45	4 54 30	6 14 00	7 33 52	4 43 41	5 57 36	7 10 45
15	4 45 19	5 59 44	7 13 25	4 53 27	6 12 46	7 32 29	4 45 19	5 59 44	7 13 25
16	4 46 53	6 01 46	7 15 58	4 52 19	6 11 25	7 30 57	4 46 53	6 01 46	7 15 58
17	4 48 22	6 03 42	7 18 24	4 51 03	6 09 56	7 29 17	4 48 22	6 03 42	7 18 24
18	4 49 44	6 05 31	7 20 42	4 49 45	6 08 20	7 27 28	4 49 44	6 05 31	7 20 42
19	4 51 02	6 07 15	7 22 53	4 48 21	6 06 37	7 25 30	4 51 02	6 07 15	7 22 53
20	4 52 15	6 08 52	7 24 50	4 46 51	6 04 48	7 23 23	4 52 15	6 08 52	7 24 50
21	4 53 22	6 10 23	7 26 52	4 45 16	6 02 51	7 21 08	4 53 22	6 10 23	7 26 52
22	4 54 23	6 11 46	7 28 39	4 43 34	6 00 48	7 18 44	4 54 23	6 11 46	7 28 39
23	4 55 20	6 13 03	7 30 20	4 41 44	5 58 37	7 16 12	4 55 20	6 13 03	7 30 20
24	4 56 12	6 14 14	7 31 52	4 39 56	5 56 19	7 13 30	4 56 12	6 14 14	7 31 52
25	4 56 59	6 15 19	7 33 10	4 37 58	5 53 54	7 10 40	4 56 59	6 15 19	7 33 10
26	4 57 38	6 16 17	7 34 32	4 35 56	5 51 23	7 07 42	4 57 38	6 16 17	7 34 32
27	4 58 14	6 17 08	7 35 40	4 33 47	5 48 43	7 04 35	4 58 14	6 17 08	7 35 40
28	4 58 45	6 17 52	7 36 41	4 31 33	5 45 57	7 01 19	4 58 45	6 17 52	7 36 41
29	4 59 10	6 18 29	7 37 30	4 29 13	5 43 04	6 57 55	4 59 10	6 18 29	7 37 30
30	4 59 30	6 18 59	7 38 11	4 26 49	5 40 05	6 54 23	4 59 30	6 18 59	7 38 11
Sign. 9.			Sign 10.			Sign 7.			

Add

Subtract.																		
Mean Anomaly.	Sign. 4.						Sign 5.						Mean Anomaly.					
	Left.Ecc.			Mean	Great			Left.Ecc.			Mean	Great						
	43619				55237			66854	43619			55237				66854		
	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2
0	4	26	49	5	40	05	6	54	23	2	37	10	3	21	48	4	07	29
1	4	24	19	5	37	00	6	50	44	2	32	27	3	15	48	4	00	10
2	4	21	43	5	33	46	6	46	52	2	27	42	3	09	41	3	52	35
3	4	19	01	5	30	25	6	42	54	2	22	54	3	03	36	3	45	14
4	4	16	14	5	26	57	6	38	48	2	18	03	2	57	24	3	37	39
5	4	13	22	5	23	24	6	34	34	2	13	09	2	51	06	3	29	59
6	4	10	25	5	19	43	6	30	11	2	08	13	2	44	45	3	22	14
7	4	07	24	5	15	58	6	25	40	2	03	14	2	38	22	3	14	24
8	4	04	18	5	12	06	6	21	01	1	58	12	2	31	25	3	06	30
9	4	01	08	5	08	07	6	16	14	1	53	07	2	25	24	2	58	31
10	3	57	53	5	04	00	6	11	20	1	48	01	2	18	32	2	50	29
11	3	54	32	4	59	48	6	06	16	1	42	52	2	12	13	2	42	23
12	3	51	07	4	55	30	6	01	06	1	37	41	2	05	32	2	34	12
13	3	47	38	4	51	06	5	55	49	1	32	27	1	58	49	2	25	58
14	3	44	04	4	46	36	5	50	21	1	27	11	1	52	05	2	17	41
15	3	40	27	4	42	00	5	44	48	1	21	54	1	45	17	2	09	21
16	3	36	43	4	37	17	5	39	06	1	16	35	1	38	26	2	00	58
17	3	32	55	4	32	27	5	33	17	1	11	14	1	31	33	1	52	31
18	3	29	02	4	27	32	5	27	22	1	05	55	1	24	38	1	44	01
19	3	25	05	4	22	33	5	21	19	1	00	27	1	17	42	1	35	29
20	3	21	04	4	17	28	5	15	09	0	55	02	1	10	44	1	26	55
21	3	16	59	4	12	17	5	08	52	0	49	34	1	03	43	1	18	19
22	3	12	48	4	07	01	5	02	28	0	44	07	0	56	42	1	09	42
23	3	08	34	4	01	40	4	55	58	0	38	37	0	49	40	1	01	03
24	3	04	16	3	56	13	4	49	21	0	33	08	0	42	36	0	52	22
25	2	59	53	3	50	40	4	42	38	0	27	38	0	35	30	0	43	40
26	2	55	27	3	45	03	4	35	48	0	22	08	0	28	25	0	34	57
27	2	50	58	3	39	21	4	28	52	0	16	37	0	21	10	0	20	13
28	2	46	26	3	33	34	4	21	49	0	11	04	0	14	13	0	12	29
29	2	41	50	3	27	43	4	14	41	0	05	32	0	07	07	0	08	55
30	2	37	10	3	21	48	4	07	29	0	00	00	0	00	00	0	00	00
	Sign 7.						Sign 6.											

A Table of Variation.

	Sign 8		Sign 7		Sign 3		
	/	//	/	//	/	//	
0	00	00	32	54	32	54	30
1	01	20	33	33	32	13	29
2	02	39	34	09	31	30	28
3	03	59	34	42	30	45	27
4	05	18	35	13	29	57	26
5	06	36	35	42	29	07	25
6	07	54	36	09	28	14	24
7	09	11	36	32	27	20	23
8	10	28	36	52	26	24	22
9	11	44	37	10	25	26	21
10	13	00	37	25	24	25	20
11	14	14	37	38	23	23	19
12	15	27	37	48	22	20	18
13	16	40	37	55	21	15	17
14	17	51	37	59	20	08	16
15	19	00	38	00	19	00	15
16	20	08	37	59	17	51	14
17	21	15	37	55	16	40	13
18	22	20	37	48	15	27	12
19	23	23	37	38	14	14	11
20	24	25	37	25	13	00	10
21	25	26	37	10	11	44	9
22	26	24	36	52	10	28	8
23	27	20	36	32	09	11	7
24	28	14	36	09	07	54	6
25	29	07	35	42	06	36	5
26	29	57	35	13	05	18	4
27	30	45	34	42	03	59	3
28	31	30	34	09	02	39	2
29	32	13	33	33	01	20	1
30	32	54	32	54	00	00	0
	Sign 11		Sign 12		Sign 9		

TABLE of Equation of the Node, and the Inclination of
the Limits above five Degrees.

Add the Equation of the Node.									
Diff. \odot from \S	Sign $\%$		Sign. $\frac{1}{7}$.		Sign. $\frac{1}{5}$.		Diff. \odot from \S		
	Equat. of Ω	Inclin. Limit.	Equat. of Ω	Inclin. Limit.	Equat. of Ω	Inclin. Limit.			
	o ' "	' "	o ' "	' "	o ' "	' "			
0	0 00 00	18 00	1 25 12	13 30	1 26 50	04 30	0		
1	0 03 28	18 00	1 27 00	13 14	1 25 01	04 14	1		
2	0 06 56	17 59	1 28 37	13 57	1 23 06	03 59	2		
3	0 10 23	17 59	1 30 04	12 40	1 21 06	03 41	3		
4	0 13 49	17 55	1 31 22	12 23	1 19 03	03 28	4		
5	0 17 11	17 52	1 32 30	12 05	1 16 56	03 13	5		
6	0 20 31	17 48	1 33 34	11 47	1 14 44	02 59	6		
7	0 23 48	17 43	1 34 31	11 29	1 12 26	02 45	7		
8	0 27 02	17 38	1 35 31	11 11	1 10 02	02 32	8		
9	0 30 13	17 34	1 36 25	10 53	1 07 31	02 19	9		
10	0 33 22	17 28	1 37 15	10 34	1 04 53	02 06	10		
11	0 36 29	17 21	1 37 59	10 14	1 02 09	01 54	11		
12	0 39 34	17 13	1 38 37	09 55	0 59 19	01 43	12		
13	0 42 37	17 05	1 39 09	09 37	0 56 23	01 32	13		
14	0 45 38	16 57	1 39 33	09 18	0 53 21	01 22	14		
15	0 48 37	16 48	1 39 46	09 00	0 50 15	01 12	15		
16	0 51 33	16 38	1 39 34	08 42	0 47 06	01 03	16		
17	0 54 27	16 28	1 39 11	08 23	0 43 56	00 57	17		
18	0 57 17	16 17	1 38 41	08 05	0 40 41	00 47	18		
19	1 00 06	16 06	1 38 05	07 46	0 37 29	00 39	19		
20	1 02 51	15 54	1 37 23	07 26	0 34 12	00 32	20		
21	1 05 31	15 41	1 36 34	07 07	0 30 53	00 26	21		
22	1 08 04	15 28	1 35 46	06 49	0 27 32	00 22	22		
23	1 10 29	15 15	1 34 56	06 31	0 24 09	00 17	23		
24	1 12 48	15 01	1 34 03	06 13	0 20 44	00 12	24		
25	1 15 01	14 47	1 33 06	05 55	0 17 18	00 08	25		
26	1 17 08	14 32	1 32 05	05 37	0 13 51	00 05	26		
27	1 19 12	14 17	1 31 00	05 20	0 10 24	00 03	27		
28	1 21 14	14 01	1 29 47	05 03	0 06 57	00 01	28		
29	1 23 14	13 46	1 28 21	04 46	0 03 29	00 00	29		
30	1 25 12	13 30	1 26 50	04 30	0 00 00	00 00	30		
	Sign $\%$		Sign. $\frac{1}{7}$.		Sign. $\frac{1}{5}$.				
Subtract the Equation of the Node.									

Table of the simple Latitude of the Moon, appropriated to the less Inclination of the Orbit, with an Increase, becoming the greatest Inclination.

Argum. Lat.	North Sign. 1 South			Increm. or Parts added			North Sign. 2 South			Increm. or Parts added			North Sign. 3 South			Increm. or Parts added			Argum. Lat.
	Lat. of the Moon.			Lat. of the Moon.			Lat. of the Moon.			Lat. of the Moon.			Lat. of the Moon.						
	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	°	'	"	
0	0	00	00	0	00		2	29	51		9	00	4	19	44	15	36		30
1	00	05	14	0	19		02	34	22		09	16	04	22	18	15	45		29
2	00	10	28	0	37		02	38	50		09	32	04	24	49	15	54		28
3	00	15	42	0	56		02	43	15		09	48	04	27	14	16	02		27
4	00	20	55	1	15		02	47	37		10	03	04	29	34	16	11		26
5	00	25	08	1	34		02	51	56		10	19	04	31	50	16	19		25
6	00	31	20	1	53		02	56	11		10	34	04	34	00	16	27		24
7	00	36	32	2	11		03	00	24		10	49	04	36	06	16	34		23
8	00	41	43	2	30		03	04	33		11	04	04	38	06	16	42		22
9	00	46	53	2	49		03	08	39		11	19	04	40	02	16	49		21
10	00	52	02	3	08		03	12	42		11	34	04	41	52	16	55		20
11	00	57	10	3	26		03	16	41		11	48	04	43	37	17	01		19
12	01	02	18	3	55		03	20	36		12	02	04	45	17	17	07		18
13	01	07	24	4	03		03	24	38		12	16	04	46	52	17	12		17
14	01	12	29	4	21		03	28	16		12	30	04	48	21	17	18		16
15	01	17	33	4	39		03	32	00		12	44	04	49	45	17	23		15
16	01	22	36	4	57		03	35	46		12	56	04	51	04	17	28		14
17	01	27	37	5	15		03	39	17		13	09	04	52	18	17	33		13
18	01	32	37	5	33		03	42	49		13	22	04	53	26	17	37		12
19	01	37	34	5	51		03	46	17		13	35	04	54	28	17	40		11
20	01	42	29	6	09		03	49	42		13	47	04	55	26	17	44		10
21	01	47	23	6	27		03	53	02		13	59	04	56	18	17	47		9
22	01	52	16	6	45		03	56	17		14	11	04	57	04	17	50		8
23	01	57	06	7	02		03	59	20		14	23	04	57	45	17	52		7
24	02	01	54	7	19		04	02	31		14	34	04	58	21	17	54		6
25	02	06	39	7	36		04	05	36		14	45	04	58	51	17	56		5
26	2	11	23	7	53		04	08	37		14	56	04	59	16	17	58		4
27	2	16	02	8	09		04	11	39		15	06	04	59	36	17	59		3
28	2	20	42	8	26		04	14	19		15	17	04	59	49	17	59		2
29	2	25	18	8	43		04	17	04		15	26	04	59	57	18	00		1
30	2	29	51	9	00		04	19	44		15	36	05	00	00	18	00		0
	North Sign. 1 South			North Sign. 2 South			North Sign. 3 South			North Sign. 4 South			North Sign. 5 South			North Sign. 6 South			

Table of Reduction, appropriated to the
 lesser Inclination of the Orbit, with the Ex-
 cels becoming the greater Inclination.

Argum. Lat.	Sign. 2 Subtr.	Excess.	Sign. 7 Subtr.	Excess.	Sign. 7 Subtr.	Excess.	Argum. Lat.
0	0 00	00	5 40	42	5 41	42	30
1	00 14	02	05 47	43	05 34	41	20
2	00 27	04	05 53	44	05 26	40	25
3	00 41	06	05 59	45	05 18	39	27
4	00 55	08	06 04	46	05 10	38	26
5	01 08	09	06 09	46	05 02	37	25
6	01 22	11	06 14	46	04 53	36	24
7	01 35	12	06 18	47	04 43	35	23
8	01 48	13	06 21	47	04 34	34	22
9	02 01	15	06 24	47	04 23	33	21
10	02 14	17	06 27	48	04 13	31	20
11	02 27	19	06 29	48	04 02	30	19
12	02 40	20	06 31	48	03 51	29	18
13	02 52	22	06 32	48	03 40	28	17
14	03 04	23	06 33	49	03 29	26	16
15	03 16	24	06 33	49	03 17	24	15
16	03 28	26	06 33	49	03 05	23	14
17	03 40	28	06 32	49	02 53	22	13
18	03 51	29	06 31	49	02 40	20	12
19	04 02	30	06 29	48	02 28	19	11
20	04 12	31	06 27	48	02 15	17	10
21	04 23	33	06 25	47	02 02	15	9
22	04 33	34	06 22	47	01 49	13	8
23	04 44	35	06 18	47	01 35	12	7
24	04 52	36	06 14	46	01 22	11	6
25	05 01	37	06 10	46	01 08	09	5
26	05 09	38	06 05	46	00 55	8	4
27	05 18	39	06 00	45	00 41	6	3
28	05 26	40	05 54	44	00 27	4	2
29	05 33	41	05 47	43	00 14	2	1
30	05 40	42	05 41	42	00 00	0	0
Sign. 2			Sign. 7		Sign. 7		

Add.

TABLE of the true Horary Motion of the Moon in the Eclipses, to the lesser and greater Eccentricity; with the true Horary Motion of the Sun, and the Semi-diameter.

Mean Anomaly.	True Horary Motion of the Earth.	Semi- diameter of the Sun.	True horary Motion of the Moon.				Mean Anomaly.
			Eccentricity.				
			4362		6685		
s o	' "	' "	' "	' "	' "	s o	
0 00	02 23	15 50	30 51	29 30		12 00	
06	02 23	15 50	30 52	29 31		24	
12	02 23	15 50	30 55	29 33		18	
18	02 23	15 50	30 59	29 39		12	
24	02 23	15 51	31 03	29 47		06	
1 00	02 23	15 52	31 10	29 57	11	00	
06	02 24	15 53	31 19	30 09		24	
12	02 24	15 54	31 29	30 22		18	
18	02 24	15 55	31 40	30 37		12	
24	02 25	15 56	31 52	30 55		06	
2 00	02 25	15 58	32 06	31 15	10	00	
06	02 26	15 59	32 21	31 36		24	
12	02 26	16 01	32 36	31 59		18	
18	02 27	16 02	32 54	32 24		12	
24	02 27	16 04	33 11	32 50		06	
3 00	02 28	16 06	33 29	33 18	9	00	
06	02 28	16 08	33 47	33 47		24	
12	02 29	16 09	34 07	34 15		18	
18	02 29	16 11	34 26	34 43		12	
24	02 30	16 13	34 45	34 12		06	
4 00	02 30	16 14	35 03	35 42	8	00	
06	02 31	16 15	35 20	36 10		24	
12	02 31	16 17	35 36	36 36		18	
18	02 32	16 19	35 51	37 01		12	
24	02 32	16 20	36 05	37 24		06	
5 00	02 32	16 21	36 17	37 45	7	00	
06	02 33	16 21	36 27	38 02		24	
12	02 33	16 22	36 34	38 15		18	
18	02 33	16 22	36 39	38 25		12	
24	02 33	16 23	36 43	38 31		06	
6 00	02 33	16 23	36 44	38 32	6	00	

TABLE of the Horizontal Parallax, and Semi-diameters of the Moon.

Mean Ano- maly.	Horizont. Paral- lax of the Moon.				Horizont. Semi- diam. of the Moon				Mean Ano- maly.
	Eccentricity.				Eccentricity.				
	4362		6685		4362		6685		
s °	' "	' "	' "	' "	' "	' "	' "	s °	
12 00	55 35	54 23	15 04	14 45	0 00				
24	55 35	54 23	15 05	14 45	06				
18	55 38	54 26	15 05	14 46	12				
12	55 43	54 31	15 06	14 47	18				
06	55 48	54 38	15 08	14 49	24				
11 00	55 54	54 47	15 10	14 52	1 00				
24	56 01	54 58	15 12	14 55	06				
18	56 09	55 11	15 14	14 58	12				
12	56 19	55 25	15 16	15 02	18				
06	56 30	55 41	15 19	15 06	24				
10 00	56 42	55 58	15 23	15 11	2 00				
24	56 56	56 17	15 27	15 16	06				
18	57 10	56 37	15 30	15 21	12				
12	57 25	56 59	15 34	15 27	18				
06	57 39	57 22	15 38	15 34	24				
9 00	57 54	57 45	15 42	15 40	3 00				
24	58 10	58 10	15 4	15 46	06				
18	58 27	58 35	15 51	15 53	12				
12	58 43	59 01	15 55	16 01	18				
06	58 58	59 25	16 00	16 07	24				
8 00	59 13	59 48	16 04	16 14	4 00				
24	59 28	60 12	16 08	16 20	06				
18	59 43	60 35	16 12	16 26	12				
12	59 56	60 56	16 16	16 32	18				
06	60 07	61 14	16 19	16 37	24				
7 00	60 16	61 30	16 21	16 41	5 00				
24	60 24	61 44	16 23	16 45	06				
18	60 30	61 55	16 25	16 48	12				
12	60 35	62 03	16 26	16 50	18				
06	60 38	62 08	16 27	16 51	24				
6 00	60 39	62 10	16 27	16 52	6 00				

TABLE of the Angle which the true Motion of the Moon from the Sun forms with the Ecliptick in the Syzgies.

True Horary Motion of the Moon from the Sun.												Argum. of Latitude.
Sign 0	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	Sig. 5	
Sign 6	0	0	0	0	0	0	0	0	0	0	Sig. 11	
Degr. 0	5 46	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	Degr. 30	
1	5 46	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	29	
2	5 46	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	28	
3	5 46	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	27	
4	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	5 36	26	
5	5 45	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	5 36	25	
6	5 44	5 43	5 42	5 41	5 40	5 39	5 38	5 37	5 36	5 35	24	
7	5 43	5 42	5 41	5 40	5 39	5 38	5 37	5 36	5 35	5 34	23	
8	5 42	5 41	5 40	5 39	5 38	5 37	5 36	5 35	5 34	5 33	22	
9	5 41	5 40	5 39	5 38	5 37	5 36	5 35	5 34	5 33	5 32	21	
10	5 41	5 40	5 39	5 38	5 37	5 36	5 35	5 34	5 33	5 32	20	
11	5 40	5 39	5 38	5 37	5 36	5 35	5 34	5 33	5 32	5 31	19	
12	5 39	5 38	5 37	5 36	5 35	5 34	5 33	5 32	5 31	5 30	18	

TABLE of Temporary Reduction between the true Syzgies of the Luminaries, and the greatest Approximation of the Centres.

Argum. of Latitude.	Subfract from the Time of a true Syzygy in the Orbit.												Argum. of Latitude.	
	True Horary Motion of the Moon from the Sun.													
	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	Sig. 5			
Sign 0	' "	' "	' "	' "	' "	' "	' "	' "	' "	' "	Sig. 11			
Sign 6	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	Degr. 30			
Digr. 0	0 33	0 34	0 35	0 36	0 37	0 38	0 39	0 40	0 41	0 42	29			
1	1 10	1 07	1 05	1 03	1 00	0 58	0 56	0 55	0 53	0 51	28			
2	2 45	1 41	1 37	1 34	1 30	1 27	1 25	1 22	1 19	1 17	27			
3	2 20	2 15	2 10	2 05	2 00	1 56	1 53	1 49	1 45	1 42	26			
4	2 35	2 48	2 42	2 06	2 30	2 25	2 21	2 16	2 12	2 08	25			
5	3 29	3 21	3 14	3 07	3 00	2 54	2 48	2 43	2 38	2 33	24			
6	4 04	3 54	3 46	3 38	3 30	3 23	3 16	3 10	3 04	2 58	23			
7	4 55	4 27	4 17	4 08	3 59	3 51	3 43	3 36	3 09	3 25	22			
8	5 11	4 59	4 48	4 38	4 28	4 19	4 10	4 02	3 54	3 47	21			
9	5 44	5 31	5 19	5 07	4 56	4 46	4 37	4 28	4 19	4 21	20			
10	6 17	6 03	5 49	5 37	5 25	5 14	5 03	4 53	4 44	4 35	19			
11	6 15	6 34	6 19	6 06	5 53	5 41	5 29	5 19	5 09	4 30	18			
12														

Add to the Time of the true Syzygy in the Orbit.

TABLE of the mean Motion of the Moon from the Sun.

Years of the Christian Æra Current	Mean Motion of the Moon from the Sun.				Julian Years expand.	Mean Motion of the Moon from the Sun.			
	s	o	'	"		s	o	'	"
1	6	24	09	42	1	04	09	37	25
1501	4	10	25	59	2	08	19	14	48
1581	10	04	05	54	3	00	28	52	11
1601	2	17	30	55	4	05	20	41	03
1621	07	00	55	56	5	10	00	18	27
1641	11	14	20	57	6	02	09	55	50
1661	03	27	45	58	7	06	19	33	14
1681	08	11	10	59	8	11	11	22	05
1701	00	24	36	00	9	03	20	59	30
1721	05	08	01	01	10	08	00	36	53
1741	09	21	26	02	11	00	10	14	17
1761	02	04	51	03	12	05	02	03	07
1781	06	18	16	04	13	09	11	40	32
1801	11	01	41	04	14	01	21	17	55
					15	06	00	55	18
					16	10	22	44	10
					17	03	02	21	35
					18	07	11	58	58
					19	11	21	36	21
					20	04	13	25	13
						Mean Motion of the Moon from the Sun			
						s	o	'	"
20	04	13	26	13		00	00	00	00
40	08	26	50	26		00	17	54	47
60	01	10	15	39		11	29	15	14
80	05	23	40	52		00	17	10	02
100	10	07	06	05					
200	08	14	12	10					
300	06	21	18	15					
400	04	28	24	20					
500	03	05	30	25					
600	01	12	36	30					
700	11	19	42	35					
800	09	26	48	40					
900	08	03	54	45					
1000	06	11	00	50					
2000	00	22	01	40					
3000	17	03	02	03					
4000	01	14	02	52					
5000	07	25	03	43					

In the Bissextile Year, after *February*, add a Day to the Time given, and the Motion of a Day to the Motions collected.

[illegible]

TABLE of the Mean Motion of Saturn's Satellites, discovered by *Huygens*, from the first Star of Aries.

Year of Christ Curr.	Epocha's s o ' "			Years.	Mean Motion s o ' "			Years.	Mean Motion s o ' "			H. M.	M. Mot. / ' ' "			H. M.	M. Mot. / ' ' "		
1641	08	29	17	1	10	20	36	1	00	22	35	1	0	56	31	29	10		
1661	10	14	10	2	09	11	12	2	01	15	09	2	1	53	32	30	06		
1681	11	29	03	3	08	01	48	3	02	07	44	3	2	49	33	31	03		
1701	01	13	56	4	07	14	59	4	03	00	18	4	3	46	34	31	59		
												5	4	42	35	32	55		
1721	02	28	49	5	06	05	35	5	03	22	53								
1741	04	13	42	6	04	26	11	6	04	15	28	6	5	39	36	33	52		
1761	05	28	35	7	03	16	47	7	05	08	02	7	6	35	37	34	48		
1781	07	13	28	8	02	26	57	8	06	00	37	8	7	32	38	35	45		
1801	08	28	21									9	8	28	39	36	41		
				9	01	20	23	9	06	23	12	10	9	24	40	37	38		
Months	Mean Motion			10	00	11	09	10	07	15	46	11	10	21	41	38	34		
				11	11	01	45	11	08	08	21	12	11	17	42	39	31		
Jan.	00	00	00	12	10	14	56	12	09	00	55	13	12	14	43	40	27		
Feb.	11	09	53									14	13	10	44	41	24		
March	03	12	02	13	09	05	32	13	09	23	30	15	14	07	45	42	20		
April	07	21	56	14	07	26	03	14	10	16	15	16							
				15	06	16	44	15	11	08	31	17	15	03	46	43	17		
May	05	09	14	16	05	29	54	16	00	01	14	18	16	00	47	44	13		
June	05	19	19					17	00	23	48	19	17	52	49	46	06		
July	04	09	29	17	04	20	30	18	01	16	23	20	18	49	50	47	03		
August	03	16	19	18	03	11	06	19	02	08	58								
				19	02	01	42	20	03	04	53	21	19	45	51	47	59		
Septemb.	02	26	12	20	01	34	50					22	20	42	52	48	56		
Octob.	01	13	31					21	03	24	07	23	21	38	53	49	52		
Nov.	00	23	24					22	04	16	42	24	22	35	54	50	49		
Decemb.	11	10	13					23	05	09	16	25	23	31	55	51	45		
								24	06	01	51								
								25	06	24	25	26	24	25	56	52	42		
								26	07	17	00	27	25	24	57	53	38		
								27	08	09	35	28	26	20	58	54	35		
								28	09	02	09	29	27	17	59	55	31		
								29				30	28	13	60	56	27		
								31	09	24	44								
								32	10	17	18								
								33	11	09	53								
								34	00	02	28								

In a Bissextile Year, after *February*, add a Day and the Motion agreeable to it.

In a Bissestile Year, after *February*, add a Day and the Motion agreeable to it.

Declination of the Points of the Ecliptick of Saturn, from its Equator, or Ring.

Deg. of the Eclip.	Declina- tion.	h of the Eclip.	Declina- tion.	h of the Eclip.	Declina- tion.
	o /		o /		o /
1	00 31	31	15 23	61	26 46
2	01 02	32	15 50	62	27 02
3	01 33	33	16 17	63	27 18
4	02 04	34	16 44	64	27 34
5	02 34	35	17 11	65	27 50
6	03 05	36	17 37	66	28 05
7	03 36	37	18 03	67	28 19
8	04 07	38	18 29	68	28 32
9	04 38	39	18 55	69	28 45
10	05 08	40	19 20	70	28 57
11	05 39	41	19 45	71	29 09
12	06 09	42	20 00	72	29 20
13	06 39	43	20 23	73	29 30
14	07 09	44	20 57	74	29 40
15	07 39	45	21 21	75	29 50
16	08 09	46	21 41	76	29 59
17	08 39	47	22 07	77	30 07
18	09 09	48	22 30	78	30 14
19	09 39	49	22 52	79	30 21
20	10 08	50	23 11	80	30 28
21	10 38	51	23 35	81	30 34
22	11 07	52	23 56	82	30 39
23	11 36	53	24 17	83	30 44
24	12 05	54	24 37	84	30 48
25	12 34	55	24 57	85	30 52
26	13 03	56	25 10	86	30 55
27	13 31	57	25 35	87	30 57
28	13 59	58	25 53	88	30 59
29	14 27	59	26 11	89	30 59
30	14 55	60	26 29	90	31 00

Epocha's of the Revolutions of the first *Satellites*, at *Jupiter's* Shadow, under the Meridian of *London*.

Julian Years current.	D. H. ' "				Numb. I.	Numb. II.
1660	0	11	5	48	968	200,6
61	0	1	17	24	1174	181,2
62	1	9	57	36	1381	162,9
63	1	0	9	12	1587	143,5
1664	1	8	49	24	1794	125,1
65	0	23	1	00	2000	105,7
66	0	13	12	36	2206	86,4
67	0	3	24	12	2412	67,0
68	0	12	4	24	171	48,6
1669	0	2	16	00	377	29,2
70	1	10	56	12	584	10,9
71	1	1	7	48	790	216,9
72	1	9	48	00	997	198,5
73	0	23	59	36	1203	179,1
1674	0	14	11	12	1409	159,7
75	0	4	22	48	1615	140,3
76	0	13	3	00	1822	121,9
77	0	3	14	36	2028	102,5
78	1	11	54	48	2235	84,1
1679	1	2	6	24	2441	64,7
80	1	10	46	36	200	46,4
81	1	00	58	12	406	27,0
82	0	15	9	48	612	7,6
83	0	5	21	24	818	213,6
1684	0	14	1	36	1025	195,3
85	0	4	13	12	1231	175,9
86	1	12	53	24	1438	157,5
87	1	3	5	00	1644	138,1
88	1	11	45	12	1851	119,7
1689	1	1	56	48	2057	100,4

Julian Years current.	D. H. ' "				Numb. I.	Numb. II.
1690	0	16	8	24	2263	81,0
91	0	6	20	00	21	61,6
92	0	15	00	12	228	43,3
93	0	5	11	48	434	23,9
94	1	13	52	00	641	5,5
1695	1	4	3	36	847	211,5
96	1	12	43	48	1054	195,1
97	1	2	55	24	1260	173,7
98	0	17	7	00	1466	154,4
99	0	7	18	36	1672	136,0
1700	0	15	58	48	1879	116,6
01	0	6	10	24	2085	97,3
02	1	14	50	36	2292	78,9
03	1	5	2	12	50	59,5
04	1	13	42	24	257	41,1
1705	1	3	54	00	463	21,8
06	0	18	5	36	669	2,4
07	0	8	17	12	875	208,4
08	0	16	57	24	1082	190,0
09	0	7	9	00	1288	170,6
1710	1	15	49	12	1495	152,3
11	1	6	00	48	1701	132,9
12	1	14	41	00	1908	114,5
13	1	4	52	36	2114	95,1
14	0	19	4	12	2320	75,8
1715	0	9	15	48	78	56,4
16	0	17	56	0	285	38,0
17	0	8	7	36	491	18,6
18	1	16	47	48	698	0,3
19	1	6	59	24	904	206,3
1720	1	15	39	36	1111	187,9

TABLE of the Revolutions of the first *Satellites* of *Jupiter*, in a Year.

January.				Numb. I.	Numb. II.	February.				Numb. I.	Numb. II.
D.	H.	'	"			D.	H.	'	"		
0	0	0	0	0	0,0	13	5	55	0	25	25,7
1	18	28	36	1	1,0	15	0	23	36	26	26,7
3	12	57	12	2	2,1	16	18	52	12	27	27,7
5	7	25	48	3	3,1	18	13	20	48	28	28,7
7	1	54	24	4	4,1	20	7	49	24	29	29,7
8	20	23	0	5	5,2	22	2	18	0	30	30,8
10	14	51	36	6	6,2	23	20	46	36	31	31,8
12	9	20	12	7	7,2	25	15	15	12	32	32,8
14	3	48	48	8	8,2	27	9	43	48	33	33,8
15	22	17	24	9	9,3	March.					
17	16	46	0	10	10,3	1	4	12	24	34	34,8
19	11	14	36	11	11,3	2	22	41	0	35	35,8
21	5	43	12	12	12,3	4	17	9	36	36	36,8
23	0	11	48	13	13,1	6	11	38	12	37	37,9
24	18	40	24	14	14,4	8	6	6	48	38	38,9
26	13	9	0	15	15,4	10	0	35	24	39	39,9
28	7	37	36	16	16,5	11	19	4	0	40	40,9
30	2	6	12	17	17,5	13	13	32	36	41	41,9
31	20	34	48	18	18,5	15	8	1	12	42	42,9
February.						17	2	29	48	43	43,9
0	20	34	48	18	18,5	18	20	58	24	44	44,9
2	15	3	24	19	19,6	20	15	27	0	45	45,9
4	9	32	0	20	20,6	22	9	55	36	46	46,9
6	4	0	36	21	21,6	24	4	24	12	47	47,9
7	22	20	12	22	22,6	25	22	52	48	48	48,9
9	16	57	48	23	23,7	27	17	21	24	49	49,9
11	11	26	24	24	24,7	29	11	50	0	50	50,9
13	5	55	0	25	25,7	31	6	18	36	51	51,9

April.				Numb. I.	Numb. II.	May.				Numb. I.	Numb. II.
D. H. ' "						D. H. ' "					
0	6	18	36	51	51,9	14	12	13	36	76	76,4
2	0	47	12	52	52,9	16	6	42	12	77	77,4
3	19	15	48	53	53,9	18	1	10	48	78	78,4
5	13	44	24	54	54,9	19	19	39	24	79	79,3
7	8	13	0	55	55,9	21	14	8	0	80	80,3
9	2	41	36	56	56,9	23	8	36	36	81	81,3
10	21	10	12	57	57,9	25	3	5	12	82	82,3
12	15	38	48	58	58,9	26	21	33	48	83	83,3
14	10	7	24	59	59,9	28	16	2	24	84	84,2
16	4	36	0	60	60,8	30	10	31	0	85	85,2
17	23	4	36	61	61,8	June.					
19	17	33	12	62	62,8	1	4	59	36	86	86,1
21	12	1	48	63	63,8	2	23	28	12	87	87,1
23	6	30	24	64	64,8	4	17	56	48	88	88,0
25	0	59	0	65	65,7	6	12	25	24	89	89,0
26	19	27	36	66	66,7	8	6	54	0	90	90,0
28	13	56	12	67	67,7	10	1	22	36	91	90,9
30	8	24	48	68	68,6	11	19	51	12	92	91,9
May.						13	14	19	48	93	92,9
0	8	24	48	68	68,6	15	8	48	24	94	93,8
2	2	53	24	69	69,6	17	3	17	0	95	94,8
3	21	22	0	70	70,6	18	21	45	36	96	95,7
5	15	50	36	71	71,6	20	16	14	12	97	96,7
7	10	19	12	72	72,5	22	10	42	48	98	97,7
9	4	47	48	73	73,5	24	5	11	24	99	98,6
10	23	16	24	74	74,5	25	23	40	0	100	99,6
12	17	45	0	75	75,5	27	18	8	36	101	100,6
14	12	13	36	76	76,4	29	12	37	12	102	101,5

TABLE of the Revolution of the first Satellites of *Jupiter*, in a Year.

July.				Number I.	Number II.	August.				Number I.	Number II.	October.				Number I.	Number II.	November.				Number I.	Number II.
D.	H.	'	"			D.	H.	'	"			D.	H.	'	"			D.	H.	'	"		
1	7	5	48	103	102,5	14	13	0	48	128	126,8	1	7	53	0	155	153,3	16	8	16	36	181	180,0
3	1	34	24	104	103,5	16	7	29	24	129	127,7	3	2	21	36	156	154,5	18	2	45	12	182	181,0
4	20	3	0	105	104,5	18	1	58	0	130	128,7	4	20	50	12	157	155,5	19	21	13	48	183	182,0
6	14	31	36	106	105,4	19	20	26	36	131	129,7	6	15	18	48	158	156,5	21	15	42	24	184	183,0
8	9	0	12	107	106,4	21	14	55	12	132	130,7	8	9	47	24	159	157,5	23	10	11	0	185	184,0
10	3	28	48	108	107,3	23	9	23	48	133	131,7	10	4	16	0	160	158,5	25	4	39	36	186	185,1
11	21	57	24	109	108,3	25	3	52	24	134	132,7	11	22	44	36	161	159,5	26	23	8	12	187	186,1
13	16	26	0	110	109,3	26	22	21	0	135	133,6	13	17	13	12	162	160,5	28	17	36	48	188	187,2
15	10	54	36	111	110,2	28	16	49	36	136	134,6	15	11	41	48	163	161,6	30	12	5	24	189	188,2
17	5	23	12	112	111,2	30	11	18	12	137	135,6	17	6	10	24	164	162,6	December.					
18	23	51	48	113	112,2	September.						19	0	39	0	165	163,6	0	12	5	24	189	188,2
20	18	20	24	114	113,1	1	5	46	48	138	136,6	20	19	7	36	166	164,6	2	6	34	0	190	189,2
22	12	49	0	114	114,1	3	0	47	24	139	137,6	22	13	36	12	167	165,6	4	1	2	36	191	190,3
24	7	17	36	116	115,1	4	18	14	0	140	138,6	24	8	4	48	168	166,6	5	19	31	12	192	191,3
26	1	46	12	117	116,0	6	13	12	36	141	139,6	26	2	23	24	169	167,7	7	13	59	48	193	192,3
27	20	14	48	118	117,0	8	7	41	12	142	140,6	27	21	2	0	170	168,7	9	8	28	24	194	193,4
29	14	43	24	119	118,0	10	2	9	48	143	141,5	29	15	30	36	171	169,7	11	2	57	0	195	194,4
31	9	12	0	120	119,0	11	20	38	24	144	142,5	31	9	59	12	172	170,7	12	21	25	36	196	195,5
August.						13	15	7	0	145	143,5	November.						14	15	54	12	197	196,5
0	9	12	0	120	119,0	15	9	35	36	146	144,5	0	9	59	12	172	170,7	16	10	22	48	198	197,6
2	3	40	36	121	119,9	17	4	4	12	147	145,5	2	4	27	48	173	171,8	18	4	51	24	199	198,6
3	22	9	12	122	120,9	18	22	32	48	148	146,5	3	22	56	24	174	172,8	19	23	20	0	200	199,7
5	10	37	48	123	121,9	20	17	1	24	149	147,5	5	17	25	0	175	173,8	21	17	48	36	201	200,7
7	11	6	24	124	122,9	22	11	30	0	150	148,5	7	11	53	36	176	174,8	23	12	17	12	202	201,8
9	5	35	0	125	123,8	24	5	58	36	151	149,5	9	6	22	12	177	175,9	25	6	45	48	203	202,8
11	0	3	36	126	124,8	26	0	27	12	152	150,5	11	0	50	48	178	176,9	27	1	14	24	204	203,9
12	18	32	12	127	125,8	27	18	55	48	153	151,5	12	19	19	24	179	177,9	28	19	43	0	205	204,9
14	3	0	48	128	126,8	29	13	24	24	154	152,5	14	13	48	0	180	178,9	30	14	11	36	206	206,0
												16	8	16	36	181	180,0						

TABLE of first Equation of the Conjunctions of the first Satellites with *Jupiter*.

Numb. I.	Equat.	Numb. I.	Equat.	Numb. I.	Equat.	Numb. I.	Equat.
0	0 0	300	28 9	610	39 5	920	26 37
10	1 3	310	28 54	620	39 3	930	25 53
20	2 5	320	29 35	630	38 58	940	25 8
30	3 8	330	30 11	640	38 51	950	24 23
40	4 12	340	30 45	650	38 44	960	23 37
50	5 15	350	31 28	660	38 34	970	22 50
60	6 16	360	32 10	670	38 24	980	22 3
70	7 19	370	32 44	680	38 10	990	21 15
80	8 20	380	33 15	690	37 56	1000	20 26
90	9 23	390	33 49	700	37 40	1010	19 37
100	10 25	400	34 20	710	37 24	1020	18 47
110	11 25	410	34 51	720	37 5	1030	17 56
120	12 25	420	35 21	730	36 45	1040	17 5
130	13 25	430	35 47	740	36 25	1050	16 13
140	14 25	440	36 6	750	36 4	1060	15 19
150	15 22	450	36 26	760	35 40	1070	14 25
160	16 18	460	36 47	770	35 15	1080	13 32
170	17 17	470	37 8	780	34 49	1090	12 37
180	18 11	480	37 29	790	34 19	1100	11 42
190	19 9	490	37 41	800	33 49	1110	10 47
200	20 5	500	37 59	810	33 21	1120	9 52
210	20 56	510	38 17	820	32 50	1130	8 57
220	21 49	520	38 26	830	32 17	1140	8 0
230	22 41	530	38 37	840	31 44	1150	7 3
240	23 32	540	38 46	850	31 10	1160	6 7
250	24 20	550	38 5	860	30 32	1170	5 10
260	25 7	560	38 59	870	29 56	1180	4 13
270	25 57	570	39 3	880	29 19	1190	3 15
280	26 43	580	39 6	890	28 40	1200	2 19
290	27 27	590	39 8	900	27 59	1210	1 21
300	28 9	600	39 7	910	27 19	1220	0 24
		610	39 5	920	26 37	1230	0 0

TABLE of second Equation of the Conjunctions of the first Satellites with *Jupiter*.

Numb. II.	Equat. add.	Numb. II.	Equat. add.	Numb. II.	Equat. add.	Numb. II.	Equat. add.
0	0' "	28	2' 4"	56	7' 0"	84	12' 0"
1	00 0	29	03 13	57	7 12	85	12 9
2	00 1	30	02 21	58	07 24	86	12 16
3	00 2	31	02 30	59	07 36	87	12 24
4	00 3	32	02 39	60	07 47	88	12 32
5	00 4	33	02 48	61	07 59	89	12 40
6	00 6	34	02 58	62	08 11	90	12 47
7	00 8	35	03 8	63	08 27	91	12 53
8	00 10	36	03 17	64	08 34	92	13 0
9	00 14	37	03 27	65	08 36	93	13 6
10	00 17	38	03 37	66	08 57	94	13 13
11	00 20	39	03 48	67	09 8	95	13 19
12	00 23	40	03 59	68	09 20	96	13 24
13	00 27	41	04 9	69	09 32	97	13 30
14	00 32	42	04 20	70	09 44	98	13 35
15	00 37	43	04 31	71	09 54	99	13 39
16	00 42	44	04 41	72	10 3	100	13 45
17	00 47	45	04 53	73	10 14	101	13 48
18	00 53	46	05 4	74	10 25	102	13 51
19	00 58	47	05 15	75	10 35	103	13 54
20	00 7	48	05 27	76	10 45	104	13 57
21	01 11	49	05 39	77	10 55	105	14 0
22	01 18	50	05 50	78	11 5	106	14 3
23	01 25	51	06 2	79	11 15	107	14 5
24	01 32	52	06 14	80	11 25	108	14 7
25	01 40	53	06 25	81	11 34	109	14 8
26	01 47	54	06 37	82	11 43	110	14 6
27	01 56	55	06 49	83	11 52	111	14 16
28	02 4	56	07 0	84	12 0	112	14 16

APPENDIX.

1223

TABLE of the half Stay of the first Satellites
in the Shadow of Jupiter.

Num.I.	H.	"	Num.I.	H.	"
0	1	4 56	1200	1	5 06
40	1	4 33	1240	1	4 48
80	1	4 12	1280	1	4 26
120	1	3 59	1320	1	4 07
160	1	3 48	1360	1	3 54
200	1	3 39	1400	1	3 38
240	1	3 38	1440	1	3 38
280	1	3 48	1480	1	3 44
320	1	4 01	1520	1	3 52
360	1	4 16	1560	1	4 07
400	1	4 36	1600	1	4 24
440	1	4 56	1640	1	4 42
480	1	5 18	1680	1	5 00
520	1	5 41	1720	1	5 22
560	1	6 01	1760	1	5 46
600	1	6 21	1800	1	6 10
640	1	6 39	1840	1	6 28
680	1	6 53	1880	1	6 45
720	1	7 03	1920	1	6 57
760	1	7 11	1960	1	7 07
800	1	7 15	2000	1	7 13
840	1	7 13	2040	1	7 14
880	1	7 09	2080	1	7 15
920	1	7 02	2120	1	7 15
960	1	6 54	2160	1	7 10
1000	1	6 39	2200	1	6 49
1040	1	6 22	2240	1	6 32
1080	1	6 05	2280	1	6 15
1120	1	5 45	2320	1	5 58
1160	1	5 26	2360	1	5 38
1200	1	5 06	2400	1	5 18
			2440	1	5 02

TABLE of the mean Motion of Saturn from the
Aphelion.

Years of Christ current.	Anomaly h s ° ' "	In the Years	Mot. of the Anom. s ° ' "
1	6 8 34 18	1	0 12 12 46
1501	5 10 11 48	2	0 24 25 32
1581	1 27 53 0	3	1 6 38 17
1601	10 2 18 18	4	1 18 53 4
1621	6 6 43 36	5	2 1 5 49
1641	2 11 8 54	6	2 13 18 35
1661	10 15 34 12	7	2 25 31 21
1681	6 19 59 30	8	3 7 46 7
1701	2 24 24 48	9	3 19 58 53
1721	10 28 50 6	10	4 2 11 39
1741	7 3 15 24	11	4 14 24 25
1761	3 7 40 42	12	4 26 39 11
1781	11 12 6 0	13	5 8 51 57
1801	7 16 31 18	14	5 21 4 42
1901	0 8 37 48	15	6 3 17 28
2001	5 0 44 18	16	6 15 32 14
In the Years	Motion of the Anomaly.	17	6 27 45 0
20	8 4 25 18	18	7 9 57 46
40	4 8 50 36	19	7 22 10 32
		20	8 4 25 18
60	0 13 15 54	Months of the common Year	Mot. of the Anom. s ° ' "
80	8 17 41 12	January	0 0 0
100	4 22 6 30	February	1 2 14
200	9 14 13 0	March	1 58 27
300	2 6 19 30	April	3 0 41
400	6 28 26 0	May	4 0 55
500	11 20 32 30	June	5 3 9
600	4 12 39 0	July	6 3 22
700	9 4 45 30	August	7 5 36
800	1 26 52 0	September	8 7 50
900	6 18 58 30	October	9 8 4
1000	11 11 5 0	November	10 10 18
2000	10 22 10 0	December	11 10 32
3000	10 3 15 0	In the Bissextile Year, after February, add a Day, and the Motion of a Day.	
4000	9 14 20 0		
5000	8 25 25 0		
6000	8 6 30 0		

TABLE of the mean Motion of Saturn from the
Aphelion.

Days.	Mot. of the Anomaly. ° ' "	H.	Motion of the Anom. ° ' "	H.	Motion of the Anom. ° ' "
1	0 2 0	1	0 05	31	2 36
2	0 4 1	2	0 10	32	2 41
3	0 6 1	3	0 15	33	2 46
4	0 8 2	4	0 20	34	2 51
5	0 10 2	5	0 25	35	2 56
6	0 12 3	6	0 30	36	3 1
7	0 14 3	7	0 35	37	3 6
8	0 16 4	8	0 40	38	3 11
9	0 18 4	9	0 45	39	3 16
10	0 20 5	10	0 50	40	3 21
11	0 22 5	11	0 55	41	3 26
12	0 24 5	12	1 0	42	3 31
13	0 26 6	13	1 5	43	3 36
14	0 28 6	14	1 10	44	3 41
15	0 30 7	15	1 15	45	3 46
16	0 32 7	16	1 20	46	3 51
17	0 34 8	17	1 25	47	3 56
18	0 36 8	18	1 30	48	4 1
19	0 38 9	19	1 35	49	4 6
20	0 40 9	20	1 40	50	4 11
21	0 42 10	21	1 45	51	4 16
22	0 44 10	22	1 50	52	4 21
23	0 46 10	23	1 55	53	4 26
24	0 48 11	24	2 0	54	4 31
25	0 50 11	25	2 5	55	4 36
26	0 52 12	26	2 10	56	4 41
27	0 54 12	27	2 15	57	4 46
28	0 56 13	28	2 20	58	4 51
29	0 58 13	29	2 25	59	4 56
30	1 00 14	30	2 30	60	5 1

Longit. Aph. h from the 1 * v 7 28 30 0
 Longit. s h from 2 22 30 0
 Inclination of the Orbit h 2 30 0
 Mean Distance h from 95380d
 Eccentricity 5470d

TABLE of the Heliocentrick Place of Saturn.

Mean Anom.	Sign. o	Longit. h from 1 * v	Northern Inc.	Dist. from O curt.
0	s ° ' "	0 1 1	0	Logarithm.
0	7 28 31 13	1 1 0	6.003608	
1	7 29 24 46	0 58 51	6.003609	
2	8 0 18 19	0 56 42	6.003605	
3	8 1 11 52	0 54 31	6.003593	
4	8 2 5 24	0 52 20	6.003575	
5	8 2 58 58	0 50 9	6.003550	
6	8 3 52 32	0 47 56	6.003519	
7	8 4 46 6	0 45 43	6.003481	
8	8 5 39 41	0 43 29	6.003435	
9	8 6 33 16	0 41 14	6.003386	
10	8 7 26 52	0 38 59	6.003328	
11	8 8 20 30	0 36 43	6.003263	
12	8 9 14 8	0 34 26	6.003193	
13	8 10 7 48	0 32 9	6.003115	
14	8 11 1 28	0 29 52	6.003032	
15	8 11 55 10	0 27 34	6.002942	
16	8 12 48 53	0 25 15	6.002845	
17	8 13 42 37	0 22 56	6.002743	
18	8 14 36 24	0 20 37	6.002633	
19	8 15 30 13	0 18 17	6.002517	
20	8 16 24 2	0 15 57	6.002395	
21	8 17 17 53	0 13 37	6.002267	
22	8 18 11 47	0 11 16	6.002131	
23	8 19 5 43	0 8 55	6.001990	
24	8 19 59 40	0 6 34	6.001842	
25	8 20 53 40	0 4 12	6.001688	
26	8 21 47 42	0 1 51	6.001527	
27	8 22 41 47	South 31	6.001361	
28	8 23 35 54	0 2 53	6.001188	
29	8 24 30 4	0 5 15	6.001009	
30	8 25 24 16	0 7 36	6.000822	

TABLE of the Heliocentrick Place of *Saturn*.

Mean Anom.	Sign. 1.									
	Long. h fr. 1 * r				North inc.			Dif. fr. © cur.		
	s	o	'	"	o	'	"	Logarithm.		
0	08	25	24	16	00	07	36	6. 000823		
1	08	26	18	32	00	09	58	6. 000632		
2	08	27	12	50	00	12	20	6. 000435		
3	08	28	07	11	00	14	42	6. 000232		
4	08	29	01	36	00	17	04	6. 000022		
5	08	29	56	03	00	19	25	5. 999806		
6	09	00	50	34	00	21	47	5. 999555		
7	09	01	45	08	00	24	08	5. 999358		
8	09	02	39	46	00	26	29	5. 999125		
9	09	03	34	27	00	28	50	5. 998887		
10	09	04	29	11	00	31	10	5. 998642		
11	09	05	24	00	00	33	30	5. 998391		
12	09	06	18	53	00	35	50	5. 998135		
13	09	07	13	49	00	38	10	5. 997874		
14	09	08	08	49	00	40	29	5. 997607		
15	09	09	03	53	00	42	47	5. 997334		
16	09	09	59	02	00	45	05	5. 997056		
17	09	10	54	15	00	47	23	5. 996772		
18	09	11	49	32	00	49	40	5. 996484		
19	09	12	44	54	00	51	57	5. 996189		
20	09	13	40	20	00	54	12	5. 995890		
21	09	14	35	51	00	56	27	5. 995585		
22	09	15	31	26	00	58	42	5. 995277		
23	09	16	27	06	01	00	56	5. 994962		
24	09	17	22	52	01	03	09	5. 994643		
25	09	18	18	42	01	05	21	5. 994319		
26	09	19	14	38	01	07	32	5. 993989		
27	09	20	10	39	01	09	42	5. 993656		
28	09	21	06	43	01	11	52	5. 993317		
29	09	22	02	54	01	14	01	5. 992973		
30	09	22	59	10	01	16	08	5. 992625		

Mean Anom.	Sign. 2.									
	Long. h fr. 1 * r				North inc.			Dif. fr. © cur.		
	s	o	'	"	o	'	"	Logarithm.		
0	09	22	59	10	01	16	08	5. 992625		
1	09	23	55	32	01	18	15	5. 992273		
2	09	24	52	00	01	20	20	5. 991917		
3	09	25	48	32	01	22	25	5. 991557		
4	09	26	45	10	01	24	28	5. 991192		
5	09	27	41	55	01	26	30	5. 990824		
6	09	28	38	45	01	28	31	5. 990451		
7	09	29	35	41	01	30	30	5. 990074		
8	10	00	32	42	01	32	29	5. 989694		
9	10	01	29	50	01	34	26	5. 989310		
10	10	02	27	04	01	36	21	5. 988922		
11	10	03	24	24	01	38	16	5. 988532		
12	10	04	21	50	01	40	08	5. 988157		
13	10	05	19	23	01	42	00	5. 987739		
14	10	06	17	03	01	43	50	5. 987338		
15	10	07	14	48	01	45	38	5. 986934		
16	10	08	12	40	01	47	24	5. 986527		
17	10	09	10	38	01	49	09	5. 986117		
18	10	10	08	44	01	50	53	5. 985704		
19	10	11	06	56	01	52	35	5. 985288		
20	10	12	05	14	01	54	14	5. 984870		
21	10	13	03	40	01	55	53	5. 984450		
22	10	14	02	13	01	57	29	5. 984027		
23	10	15	00	52	01	59	03	5. 983603		
24	10	15	59	38	02	00	36	5. 983176		
25	10	16	58	30	02	02	06	5. 982747		
26	10	17	57	29	02	03	35	5. 982315		
27	10	18	56	37	02	05	02	5. 981883		
28	10	19	55	50	02	06	26	5. 981448		
29	10	20	55	12	02	07	48	5. 981013		
30	10	21	54	42	02	09	09	5. 980576		

Mean Anom.	Sign. 3.									
	Long. h fr. 1 * r				North inc.			Dif. fr. © cur.		
	s	o	'	"	o	'	"	Logarithm.		
0	10	21	54	42	02	09	09	5. 980576		
1	10	22	54	18	02	10	27	5. 980139		
2	10	23	54	01	02	11	43	5. 979700		
3	10	24	53	51	02	12	57	5. 979260		
4	10	25	53	49	02	14	08	5. 978819		
5	10	26	53	54	02	15	17	5. 978378		
6	10	27	54	06	02	16	24	5. 977936		
7	10	28	54	25	02	17	29	5. 977494		
8	10	29	54	52	02	18	31	5. 977051		
9	11	00	55	27	02	19	30	5. 976609		
10	11	01	50	08	02	20	27	5. 976166		
11	11	02	56	58	02	21	22	5. 975724		
12	11	03	57	51	02	22	14	5. 975282		
13	11	04	53	59	02	23	03	5. 974841		
14	11	06	00	12	02	23	50	5. 974400		
15	11	07	01	31	02	24	34	5. 973960		
16	11	08	02	58	02	25	16	5. 973520		
17	11	09	04	32	02	25	54	5. 973083		
18	11	10	06	13	02	26	30	5. 972647		
19	11	11	08	02	02	27	04	5. 972211		
20	11	12	10	00	02	27	34	5. 971777		
21	11	13	12	03	02	28	02	5. 971345		
22	11	14	14	15	02	28	27	5. 970915		
23	11	15	16	55	02	28	49	5. 970487		
24	11	16	18	59	02	29	08	5. 970060		
25	11	17	21	31	02	29	24	5. 969637		
26	11	18	24	14	02	29	37	5. 969216		
27	11	19	27	03	02	29	47	5. 968798		
28	11	20	29	57	02	29	55	5. 968382		
29	11	21	33	01	02	29	59	5. 967970		
30	11	22	40	10	02	30	00	5. 967559		

Mean Anom	Sign. 4.									
	Long. h fr. 1 * r				North inc.			Dif. fr. © cur.		
°	s	o	'	"	o	'	"	Logarithm.		
°	11	22	36	10	02	30	00	5. 967559		
1	11	23	39	27	02	29	58	5. 967153		
2	11	24	42	52	02	29	53	5. 966750		
3	11	25	46	22	02	29	45	5. 966350		
4	11	26	50	00	02	29	34	5. 965954		
5	11	27	53	45	02	29	20	5. 965562		
6	11	28	57	38	02	29	03	5. 965175		
7	00	00	01	37	02	28	43	5. 964791		
8	00	01	05	42	02	28	19	5. 964412		
9	00	02	09	54	02	27	52	5. 964036		
10	00	03	14	13	02	27	23	5. 963666		
11	00	04	18	37	02	26	50	5. 963300		
12	00	05	23	10	02	26	14	5. 962939		
13	00	06	27	48	02	25	34	5. 962584		
14	00	07	32	32	02	24	52	5. 962233		
15	00	08	37	23	02	24	06	5. 961888		
16	00	09	42	20	02	23	18	5. 961549		
17	00	10	47	23	02	22	26	5. 961214		
18	00	11	52	32	02	21	21	5. 960886		
19	00	12	57	46	02	20	33	5. 960564		
20	00	14	03	06	02	19	31	5. 960248		
21	00	15	08	33	02	18	27	5. 959938		
22	00	16	14	04	02	17	20	5. 959634		
23	00	17	19	42	02	16	09	5. 959337		
24	00	18	25	24	02	14	55	5. 959046		
25	00	19	31	11	02	13	39	5. 958762		
26	00	20	37	03	02	12	19	5. 958484		
27	00	21	43	01	02	10	56	5. 958214		
28	00	22	49	04	02	09	30	5. 957951		
29	00	23	55	11	02	08	02	5. 957695		
30	00	25	01	23	02	06	30	5. 957445		

TABLES of the Heliocentrick Place of *Saturn*.

Mean Anom.	Sign 5									
	Longit. \hbar from $1^{\circ} \ast \Upsilon$				Southern Inc.			Dist. from \odot curt.		
	$^{\circ}$	$'$	$''$	$'''$	$^{\circ}$	$'$	$''$	$^{\circ}$	$'$	Logarithm.
0	0	25	1	23	2	6	30			5.957445
1	0	26	7	40	2	4	55			5.957203
2	0	27	14	0	2	3	18			5.956969
3	0	28	20	25	2	1	37			5.956742
4	0	29	26	53	1	59	54			5.956523
5	1	0	33	26	1	58	8			5.956312
6	1	1	40	3	1	56	20			5.956107
7	1	2	46	44	1	54	28			5.955912
8	1	3	53	27	1	52	34			5.955724
9	1	5	0	15	1	50	37			5.955544
10	1	6	7	5	1	48	38			5.955373
11	1	7	13	58	1	46	36			5.955210
12	1	8	20	55	1	44	31			5.955055
13	1	9	27	54	1	42	24			5.954910
14	1	10	34	57	1	40	15			5.954771
15	1	11	42	1	1	38	3			5.954641
16	1	12	49	8	1	35	49			5.954520
17	1	13	56	16	1	33	32			5.954408
18	1	15	3	26	1	31	14			5.954304
19	1	16	10	38	1	28	53			5.954209
20	1	17	17	53	1	26	30			5.954122
21	1	18	25	9	1	24	5			5.954044
22	1	19	32	27	1	21	39			5.953974
23	1	20	39	45	1	19	10			5.953914
24	1	21	47	4	1	16	39			5.953862
25	1	22	54	24	1	14	7			5.953819
26	1	24	1	45	1	11	32			5.953786
27	1	25	9	7	1	8	57			5.953761
28	1	26	16	28	1	6	19			5.953745
29	1	27	23	50	1	3	40			5.953738
30	1	28	31	13	1	1	0			5.953740

Mean Anom.	Sign 6.									
	Longit. \hbar from $1^{\circ} \ast \Upsilon$				Southern Inc.			Dist. from \odot curt.		
	$^{\circ}$	$'$	$''$	$'''$	$^{\circ}$	$'$	$''$	$^{\circ}$	$'$	Logarithm.
0	1	28	31	13	1	1	0			5.953740
1	1	29	38	36	0	58	18			5.953750
2	2	0	45	57	0	55	35			5.953709
3	2	1	53	18	0	52	50			5.953797
4	2	3	0	39	0	50	4			5.953834
5	2	4	7	59	0	47	18			5.953879
6	2	5	15	18	0	44	30			5.953934
7	2	6	22	35	0	41	41			5.953997
8	2	7	29	52	0	38	51			5.954069
9	2	8	37	8	0	36	0			5.954150
10	2	9	44	21	0	33	9			5.954239
11	2	10	51	34	0	30	27			5.954337
12	2	11	58	43	0	27	24			5.954443
13	2	13	5	51	0	24	31			5.954558
14	2	14	12	57	0	21	38			5.954680
15	2	15	20	0	0	18	44			5.954812
16	2	16	27	1	0	15	49			5.954951
17	2	17	34	1	0	12	54			5.955099
18	2	18	40	56	0	10	0			5.955254
19	2	19	47	49	0	7	5			5.955418
20	2	20	54	38	0	4	10			5.955590
21	2	22	1	25	0	1	15			5.955769
22	2	23	8	8	Nor. 1	40				5.955957
23	2	24	14	47	0	4	35			5.956153
24	2	25	21	23	0	7	29			5.956355
25	2	26	27	55	0	10	23			5.956566
26	2	27	34	24	0	13	16			5.956784
27	2	28	40	47	0	16	9			5.957009
28	2	29	47	7	0	19	2			5.957241
29	3	0	53	23	0	21	54			5.957481
30	3	1	59	34	0	24	45			5.957728

Mean Anom.	Sign 7.									
	Longit. \hbar from $1^{\circ} \ast \Upsilon$				Northern Inc.			Dist. from \odot curt.		
	$^{\circ}$	$'$	$''$	$'''$	$^{\circ}$	$'$	$''$	$^{\circ}$	$'$	Logarithm.
0	3	1	59	34	0	24	45			5.957728
1	3	3	5	40	0	27	36			5.957982
2	3	4	11	42	0	30	25			5.958242
3	3	5	17	40	0	33	14			5.958509
4	3	6	23	32	0	36	2			5.958782
5	3	7	29	19	0	38	49			5.959062
6	3	8	35	0	0	41	35			5.959349
7	3	9	40	37	0	44	19			5.959642
8	3	10	46	9	0	47	3			5.959940
9	3	11	51	35	0	49	45			5.960245
10	3	12	56	57	0	52	26			5.960555
11	3	14	2	11	0	55	6			5.960871
12	3	15	7	20	0	57	44			5.961193
13	3	16	12	24	1	0	20			5.961520
14	3	17	17	21	1	2	55			5.961853
15	3	18	22	12	1	5	29			5.962191
16	3	19	26	58	1	18	1			5.962534
17	3	20	31	37	1	10	31			5.962882
18	3	21	36	10	1	13	0			5.963234
19	3	22	40	37	1	15	26			5.963592
20	3	23	44	56	1	17	51			5.963954
21	3	24	49	10	1	20	14			5.964320
22	3	25	53	17	1	22	35			5.964691
23	3	26	57	18	1	24	54			5.965065
24	3	28	1	11	1	27	11			5.965443
25	3	29	4	59	1	29	26			5.965825
26	4	0	8	40	1	31	39			5.966211
27	4	1	12	13	1	33	50			5.966600
28	4	2	15	39	1	35	58			5.966993
29	4	3	19	1	1	38	5			5.967389
30	4	4	22	12	1	40	9			5.967789

Mean Anom.	Sign 8.									
	Longit. \hbar from $1^{\circ} \ast \Upsilon$				Northern Inc.			Dist. from \odot curt.		
	$^{\circ}$	$'$	$''$	$'''$	$^{\circ}$	$'$	$''$	$^{\circ}$	$'$	Logarithm.
0	4	4	22	12	1	40	9			5.967789
1	4	5	25	18	1	42	11			5.968191
2	4	6	28	18	1	44	11			5.968595
3	4	7	31	9	1	46	8			5.969003
4	4	8	33	54	1	48	3			5.969412
5	4	9	36	31	1	49	56			5.969825
6	4	10	39	2	1	51	46			5.970240
7	4	11	41	25	1	53	34			5.970657
8	4	12	43	40	1	55	19			5.971076
9	4	13	45	50	1	57	2			5.971496
10	4	14	47	51	1	58	42			5.971918
11	4	15	49	46	2	0	20			5.972343
12	4	16	51	33	2	1	56			5.972768
13	4	17	53	12	2	3	29			5.973194
14	4	18	54	44	2	4	59			5.973621
15	4	19	56	10	2	6	27			5.974050
16	4	20	57	27	2	7	52			5.974480
17	4	21	58	38	2	9	14			5.974910
18	4	22	59	42	2	10	34			5.975341
19	4	24	0	38	2	11	51			5.975771
20	4	25	1	27	2	13	6			5.976203
21	4	26	2	8	2	14	18			5.976635
22	4	27	2	42	2	15	27			5.977067
23	4	28	3	9	2	16	34			5.977498
24	4	29	3	28	2	17	38			5.977930
25	5	0	3	41	2	18	39			5.978361
26	5	1	3	46	2	19	38			5.978792
27	5	2	3	45	2	20	34			5.979222
28	5	3	3	35	2	21	27			5.979651
29	5	4	3	19	2	22	18			5.980080
30	5	5	2	16	2	23	6			5.980507

TABLES of the Heliocentrick Place of *Saturn*.

Mean Anom.	Sign. 9.											
	Longit. h from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	'	"	o	'	"	Logarithm.				
0	5	5	2	56	2	23	6	5.980507				
1	5	6	2	27	2	23	52	5.980933				
2	5	7	1	50	2	24	34	5.981358				
3	5	8	1	5	2	25	14	5.981789				
4	5	9	0	14	2	25	52	5.982205				
5	5	9	59	15	2	26	27	5.982627				
6	5	10	58	10	2	26	59	5.983046				
7	5	11	56	58	2	27	28	5.983463				
8	5	12	55	40	2	27	55	5.983879				
9	5	13	54	15	2	28	19	5.984293				
10	5	14	52	43	2	28	41	5.984704				
11	5	15	51	4	2	29	0	5.985113				
12	5	16	49	19	2	29	16	5.985520				
13	5	17	47	28	2	29	30	5.985925				
14	5	18	45	29	2	29	41	5.986327				
15	5	19	43	25	2	29	49	5.986726				
16	5	20	41	13	2	29	56	5.987123				
17	5	21	38	56	2	29	59	5.987517				
18	5	22	36	32	2	30	0	5.987907				
19	5	23	34	3	2	29	58	5.988296				
20	5	24	31	36	2	29	54	5.988680				
21	5	25	28	44	2	29	48	5.989062				
22	5	26	25	57	2	29	39	5.989439				
23	5	27	23	2	2	29	27	5.989814				
24	5	28	20	1	2	29	13	5.990186				
25	5	29	16	56	2	28	57	5.990553				
26	6	0	13	45	2	28	38	5.990917				
27	6	1	10	27	2	28	17	5.991278				
28	6	2	7	4	2	27	54	5.991634				
29	6	3	3	36	2	27	28	5.991986				
30	6	4	0	2	2	27	0	5.992335				

Mean Anom.	Sign 10											
	Longit. h from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	'	"	o	'	"	Logarithm.				
0	6	4	0	2	2	27	0	5.992335				
1	6	4	56	23	2	26	29	5.992680				
2	6	5	52	39	2	25	56	5.993021				
3	6	6	48	48	2	25	21	5.993357				
4	6	7	44	53	2	24	44	5.993688				
5	6	8	40	54	2	24	4	5.994016				
6	6	9	36	48	2	23	32	5.994338				
7	6	10	32	39	2	22	38	5.994656				
8	6	11	28	24	2	21	52	5.994970				
9	6	12	24	4	2	21	3	5.995278				
10	6	13	19	39	2	20	13	5.995583				
11	6	14	15	9	2	19	20	5.995882				
12	6	15	10	36	2	18	25	5.996177				
13	6	16	5	58	2	17	28	5.996466				
14	6	17	1	16	2	16	29	5.996751				
15	6	17	56	29	2	15	28	5.997031				
16	6	18	51	38	2	14	25	5.997305				
17	6	19	46	43	2	13	20	5.997574				
18	6	20	41	43	2	12	13	5.997838				
19	6	21	36	40	2	11	4	5.998096				
20	6	22	31	34	2	9	53	5.998350				
21	6	23	26	23	2	8	41	5.998598				
22	6	24	21	8	2	7	26	5.998840				
23	6	25	15	50	2	6	10	5.999076				
24	6	26	10	29	2	4	51	5.999308				
25	6	27	5	4	2	3	31	5.999533				
26	6	27	59	34	2	2	9	5.999753				
27	6	28	54	3	2	0	46	5.999968				
28	6	29	48	28	1	59	20	6.000176				
29	7	0	42	50	1	57	53	6.000379				
30	7	1	37	10	1	56	24	6.000575				

TABLE of the Heliocentrick Place of *Saturn*.

Mean Anom.	Sign. 11.											
	Longit. h from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	'	"	o	'	"	Logarithm.				
0	7	1	37	10	1	56	24	6.000575				
1	7	2	31	26	1	54	54	6.000767				
2	7	3	25	39	1	53	22	6.000951				
3	7	4	19	50	1	51	48	6.001131				
4	7	5	13	58	1	50	13	6.001304				
5	7	6	8	4	1	48	36	6.001472				
6	7	7	2	7	1	46	57	6.001632				
7	7	7	56	7	1	45	17	6.001787				
8	7	8	50	6	1	43	30	6.001936				
9	7	9	44	3	1	41	53	6.002079				
10	7	10	37	57	1	40	9	6.002216				
11	7	11	31	49	1	38	23	6.002345				
12	7	12	25	40	1	36	36	6.002470				
13	7	13	19	28	1	34	47	6.002588				
14	7	14	13	14	1	32	58	6.002698				
15	7	15	7	0	1	31	7	6.002803				
16	7	16	0	44	1	29	14	6.002902				
17	7	16	54	26	1	27	20	6.001904				
18	7	17	48	8	1	25	25	6.003081				
19	7	18	41	48	1	23	29	6.003160				
20	7	19	35	27	1	21	32	6.003234				
21	7	20	29	4	1	19	34	6.003301				
22	7	21	22	41	1	17	34	6.003390				
23	7	22	16	17	1	15	33	6.003414				
24	7	23	9	52	1	13	31	6.003462				
25	7	24	3	25	1	11	29	6.003502				
26	7	24	57	0	1	9	25	6.003536				
27	7	25	50	33	1	7	20	6.003565				
28	7	26	44	7	1	5	14	6.003585				
29	7	27	37	40	1	3	7	6.003600				
30	7	28	31	13	1	1	0	6.003608				

TABLE of the mean Motion of *Jupiter* from the *Aphelion*.

Years of Chart current.	Anomaly h //				In the Years	Mot. of the Anom.			
	s	o	'	"		s	o	'	"
1	0	13	54	30	1	1	0	19	44
1501	5	28	17	0	2	2	0	39	27
1581	2	26	15	0	3	3	0	59	11
1601	11	3	14	30	4	4	1	23	54
1621	7	10	14	0	5	5	1	43	38
1641	3	17	13	30	6	6	2	3	21
1661	11	24	13	0	7	7	2	23	5
1681	8	1	12	30	8	8	2	47	48
1701	4	8	12	0	9	9	3	7	32
1721	0	15	11	30	10	10	3	27	15
1741	8	22	11	0	11	11	3	46	59
1761	4	29	10	30	12	0	4	11	42
1781	1	6	10	0	13	1	4	31	26
1801	9	13	9	30	14	2	4	51	9
1901	2	18	7	0	15	3	5	10	53
2001	7	23	4	30	16	4	5	35	36
In the Years	Motion of the Anomaly.				17	5	5	55	20
20	8	6	59	30	18	6	6	15	3
40	4	13	59	0	19	7	6	34	47
					20	8	6	59	30
60	0	20	58	30	Months of the common Year	Mot. of the Anom.			
80	8	27	58	0		o	"	"	
100	5	4	57	30	January	0	0	0	
200	10	9	55	0	February	2	34	33	
300	3	14	52	30	March	4	54	9	
400	8	19	50	0	April	7	28	42	
500	1	24	47	30	May	9	58	16	
600	6	29	45	0	June	12	32	49	
700	0	4	42	30	July	15	2	23	
800	5	9	40	0	August	17	36	56	
900	10	14	37	30	September	20	11	29	
1000	3	19	35	0	October	22	41	3	
2000	7	9	10	0	November	25	15	37	
3000	10	28	45	0	December	27	45	11	
4000	2	18	20	0	In the Billextile Year, after February, add a Day, and the Motion of a Day.				
5000	6	7	55	0					
6000	0	27	30	0					

TABLE of the mean Motion of *Jupiter* from the *Aphelion*.

Days.	Mot. of the Anomaly.		Motion of the Anom.		Motion of the Anom.
	° ' "		° ' "		° ' "
1	0 14 59	H.	" "	H.	" "
2	0 19 58		" "		" "
3	0 14 57	1	0 12	31	6 26
4	0 19 57	2	0 25	32	6 39
5	0 24 56	3	0 37	33	6 51
6	0 29 55	4	0 50	34	7 4
7	0 34 54	5	1 02	35	7 16
8	0 34 53	6	1 15	36	7 29
9	0 44 52	7	1 27	37	7 41
10	0 49 51	8	1 40	38	7 54
11	0 54 50	9	1 52	39	8 6
12	0 59 50	10	2 05	40	8 19
13	1 4 49	11	2 17	41	8 31
14	1 9 48	12	2 30	42	8 43
15	1 14 47	13	2 42	43	8 56
16	1 19 46	14	2 54	44	9 8
17	1 24 45	15	3 07	45	9 21
18	1 29 44	16	3 19	46	9 33
19	1 34 44	17	3 32	47	9 46
20	1 39 43	18	3 44	48	9 58
21	1 44 42	19	3 57	49	10 11
22	1 49 41	20	4 09	50	10 23
23	1 54 40	21	4 22	51	10 36
24	1 59 39	22	4 34	52	10 48
25	2 14 38	23	4 47	53	11 1
26	2 09 37	24	4 59	54	11 13
27	2 14 37	25	5 12	55	11 26
28	2 19 36	26	5 24	56	11 38
29	2 34 35	27	5 37	57	11 50
30	2 29 34	28	5 49	58	11 3
31	2 54 33	29	6 01	59	12 15
32	2 39 32	30	6 14	60	12 28

Longit. Aph. $\frac{1}{2}$ from the \perp * γ 5 9 50 0
 Longit. \odot $\frac{1}{2}$ from the \perp * γ 2 8 00 0
 Inclination of the Orbit $\frac{1}{2}$ 1 20 0
 Mean Distance $\frac{1}{2}$ from \odot 520110
 Eccentricity 25050

TABLE of the Heliocentrick Place of *Jupiter*.

Mean Anom.	Sign. o.			Sign. o.		
	Long. $\frac{1}{2}$ fr. \perp * γ			North inc.		
	°	'	"	°	'	"
0	05	09	50 02	01	19	58
1	05	10	44 36	01	19	55
2	05	11	39 10	01	19	51
3	05	12	33 44	01	19	45
4	05	13	28 18	01	19	38
5	05	14	22 53	01	19	30
6	05	15	17 28	01	19	21
7	05	16	12 04	01	19	11
8	05	17	06 40	01	18	59
9	05	18	01 17	01	18	47
10	05	18	55 55	01	18	33
11	05	19	50 32	01	18	18
12	05	20	45 11	01	18	02
13	05	21	39 52	01	17	44
14	05	22	34 33	01	17	26
15	05	23	29 15	01	17	06
16	05	24	23 59	01	16	45
17	05	25	18 44	01	16	23
18	05	26	13 30	01	15	59
19	05	27	08 18	01	15	35
20	05	28	03 08	01	15	09
21	05	28	57 59	01	14	42
22	05	29	52 52	01	14	14
23	06	00	47 46	01	13	45
24	06	01	42 43	01	13	15
25	06	02	37 40	01	12	44
26	06	03	32 41	01	12	11
27	06	04	27 43	01	11	37
28	06	05	22 47	01	11	02
29	06	06	17 55	01	10	27
30	06	07	13 04	01	09	50

TABLES of the Heliocentrick Place of *Jupiter*.

Mean Anom.	Sign. 1.			Sign. 1.		
	Long. $\frac{1}{2}$ fr. \perp * γ			North inc.		
	°	'	"	°	'	"
0	06	07	13 04	01	09	50
1	06	08	08 15	01	09	11
2	06	09	03 30	01	08	32
3	06	09	58 46	01	07	52
4	06	10	54 05	01	07	10
5	06	11	49 28	01	06	28
6	06	12	44 53	01	05	44
7	06	13	40 20	01	05	00
8	06	14	35 52	01	04	14
9	06	15	31 26	01	03	27
10	06	16	27 03	01	02	39
11	06	17	22 43	01	01	51
12	06	18	18 26	01	01	01
13	06	19	14 11	01	00	10
14	06	20	10 04	00	59	18
15	06	21	05 58	00	58	25
16	06	22	01 55	00	57	31
17	06	22	57 56	00	56	36
18	06	23	54 01	00	55	41
19	06	24	50 09	00	54	44
20	06	25	46 22	00	53	46
21	06	26	42 38	00	52	48
22	06	27	38 57	00	51	48
23	06	28	35 21	00	50	48
24	06	29	31 50	00	49	46
25	07	00	28 23	00	48	44
26	07	01	25 00	00	47	41
27	07	02	21 41	00	46	37
28	07	03	18 26	00	45	32
29	07	04	15 17	00	44	27
30	07	05	12 10	00	43	20

Mean Anom.	Sign. 2.			Sign. 2.		
	Long. $\frac{1}{2}$ fr. \perp * γ			North inc.		
	°	'	"	°	'	"
0	07	05	12 10	00	43	20
1	07	06	09 10	00	42	13
2	07	07	06 14	00	41	05
3	07	08	03 22	00	39	56
4	07	09	00 36	00	38	47
5	07	09	57 54	00	37	36
6	07	10	55 16	00	36	25
7	07	11	52 45	00	35	14
8	07	12	50 17	00	34	01
9	07	13	47 56	00	32	48
10	07	14	45 39	00	31	34
11	07	15	43 28	00	30	20
12	07	16	41 21	00	29	05
13	07	17	39 19	00	27	49
14	07	18	37 23	00	26	33
15	07	19	35 32	00	25	16
16	07	20	33 48	00	23	59
17	07	21	32 08	00	22	41
18	07	22	30 34	00	21	22
19	07	23	29 06	00	20	03
20	07	24	27 43	00	18	44
21	07	25	26 26	00	17	24
22	07	26	25 14	00	16	04
23	07	27	24 09	00	14	43
24	07	28	23 09	00	13	22
25	07	29	22 14	00	12	00
26	08	00	21 26	00	10	39
27	08	01	20 43	00	09	16
28	08	02	20 07	00	07	54
29	08	03	19 36	00	06	31
30	08	04	19 11	00	05	08

TABLES of the Heliocentrick Place of *Jupiter*.

Mean Anom.	Sign 3.						
	Long. 24 fr. 1 * v				North inc.		Dif. fr. ☉ cur.
	s	o	/	//	o	/	Logarithm.
0	8	4	19	11	0	5	8 5.717101
1	8	5	18	52	00	3	45 5.716738
2	8	6	18	39	00	2	22 5.716374
3	8	7	18	32	00	0	58 5.716009
4	8	8	18	32	South	0	26 5.715644
5	8	9	18	37	00	1	50 5.715278
6	8	10	18	49	00	3	14 5.714911
7	8	11	19	6	00	4	38 5.714545
8	8	12	19	30	00	6	2 5.714177
9	8	13	20	0	00	7	26 5.713809
10	8	14	20	36	00	8	50 5.713443
11	8	15	21	18	00	10	15 5.713076
12	8	16	22	6	00	11	39 5.712710
13	8	17	23	1	00	13	3 5.712342
14	8	18	24	2	00	14	27 5.711976
15	8	19	25	9	00	15	50 5.711611
16	8	20	26	22	00	17	14 5.711248
17	8	21	27	41	00	18	38 5.710884
18	8	22	29	6	00	20	1 5.710521
19	8	23	30	38	00	21	24 5.710159
20	8	24	32	15	00	22	47 5.709798
21	8	25	34	0	00	24	9 5.709439
22	8	26	35	50	00	25	31 5.709081
23	8	27	37	46	00	26	53 5.708725
24	8	28	39	48	00	28	14 5.708371
25	8	29	41	56	00	29	35 5.708018
26	9	0	44	11	00	30	55 5.707667
27	9	1	46	31	00	32	15 5.707319
28	9	2	48	58	00	33	35 5.706972
29	9	3	51	30	00	34	54 5.706629
30	9	4	54	9	00	36	12 5.706287

Mean Anom.	Sign 4.						
	Long. 24 fr. 1 * v				South Inc.		Dif. fr. ☉ cur.
	s	o	/	//	o	/	Logarithm.
0	9	4	54	9	0	36	12 5.706287
1	9	5	56	53	00	37	30 5.705948
2	9	6	59	43	00	38	47 5.705611
3	9	8	2	39	00	40	4 5.705278
4	9	9	5	40	00	41	19 5.704948
5	9	10	8	48	00	42	34 5.704620
6	9	11	12	1	00	43	49 5.704296
7	9	12	15	19	00	45	2 5.703975
8	9	13	18	44	00	46	15 5.703658
9	9	14	22	14	00	47	27 5.703344
10	9	15	25	49	00	48	38 5.703034
11	9	16	29	30	00	49	48 5.702727
12	9	17	33	16	00	50	57 5.702424
13	9	18	37	7	00	52	5 5.702126
14	9	19	41	4	00	53	12 5.701832
15	9	20	45	6	00	54	19 5.701542
16	9	21	49	13	00	55	24 5.701257
17	9	22	53	24	00	56	28 5.700974
18	9	23	57	41	00	57	31 5.700698
19	9	25	2	3	00	58	33 5.700427
20	9	26	6	29	00	59	33 5.700160
21	9	27	11	1	01	0	33 5.699899
22	9	28	15	37	01	1	31 5.699642
23	9	29	20	17	01	2	28 5.699391
24	10	0	25	2	01	3	24 5.699145
25	10	1	29	52	01	4	19 5.698904
26	10	2	34	45	01	5	12 5.698669
27	10	3	39	41	01	6	4 5.698440
28	10	4	44	44	01	6	54 5.698216
29	10	5	49	49	01	7	43 5.697999
30	10	6	54	58	01	8	31 5.697786

Mean Anom.	Sign 5.						
	Long. 24 fr. 1 * v				South Inc.		Dif. fr. ☉ cur.
	s	o	/	//	o	/	Logarithm.
0	10	6	54	58	1	8	31 5.697786
1	10	8	0	12	01	9	17 5.697580
2	10	9	5	28	01	10	2 5.697385
3	10	10	10	49	01	10	45 5.697186
4	10	11	16	13	01	11	27 5.696998
5	10	12	21	39	01	12	8 5.696817
6	10	13	27	10	01	12	46 5.696643
7	10	14	32	44	01	13	24 5.696474
8	10	15	38	19	01	13	59 5.696313
9	10	16	43	59	01	14	33 5.696159
10	10	17	49	41	01	15	6 5.696010
11	10	18	55	26	01	15	36 5.695869
12	10	20	1	13	01	16	6 5.695734
13	10	21	7	2	01	16	33 5.695606
14	10	22	12	53	01	16	59 5.695486
15	10	23	18	47	01	17	23 5.695372
16	10	24	24	43	01	17	46 5.695266
17	10	25	30	41	01	18	6 5.695167
18	10	26	36	41	01	18	26 5.695074
19	10	27	42	42	01	18	43 5.694987
20	10	28	48	41	01	18	58 5.694911
21	10	29	54	48	01	19	12 5.694842
22	11	1	0	53	01	19	24 5.694779
23	11	2	6	59	01	19	35 5.694723
24	11	3	13	6	01	19	43 5.694675
25	11	4	19	14	01	19	50 5.694631
26	11	5	25	23	01	19	55 5.694603
27	11	6	31	33	01	19	58 5.694575
28	11	7	37	42	01	20	0 5.694555
29	11	8	43	52	01	20	0 5.694544
30	11	9	50	2	01	19	58 5.694540

Mean Anom.	Sign 6.						
	Long. 24 fr. 1 * v				South Inc.		Dif. fr. ☉ cur.
	s	o	/	//	o	/	Logarithm.
0	11	9	50	2	1	19	58 5.694540
1	11	10	56	12	01	19	54 5.694545
2	11	12	2	22	01	19	48 5.694556
3	11	13	8	31	01	19	41 5.694576
4	11	14	14	40	01	19	32 5.694602
5	11	15	20	49	01	19	21 5.694635
6	11	16	26	57	01	19	8 5.694677
7	11	17	33	4	01	18	53 5.694725
8	11	18	39	10	01	18	37 5.694781
9	11	19	45	15	01	18	19 5.694844
10	11	20	51	19	01	18	0 5.694914
11	11	21	57	21	01	17	38 5.694992
12	11	23	3	22	01	17	15 5.695077
13	11	24	9	22	01	16	51 5.695171
14	11	25	15	20	01	16	24 5.695270
15	11	26	21	15	01	15	56 5.695376
16	11	27	27	9	01	15	26 5.695490
17	11	28	33	0	01	14	55 5.695611
18	11	29	38	50	01	14	23 5.695738
19	0	0	44	37	01	13	47 5.695847
20	0	1	50	22	01	13	11 5.696016
21	0	2	56	3	01	12	33 5.696164
22	0	4	1	43	01	11	53 5.696319
23	0	5	7	18	01	11	12 5.696481
24	0	6	12	52	01	10	30 5.696649
25	0	7	18	23	01	9	46 5.696824
26	0	8	23	49	01	9	0 5.697005
27	0	9	29	13	01	8	14 5.697192
28	0	10	34	33	01	7	25 5.697386
29	0	11	39	50	01	6	35 5.697587
30	0	12	45	3	01	5	44 5.697793

TABLES of the Heliocentrick Place of *Jupiter*.

Mean Anom.	Sign 7.											
	Longit. 14 from 1 * ♄				Southern Inc.				Dist. from ☉ curr.			
0	s	o	/	//	o	/	//		Logarithm.			
0	0	12	45	3	1	5	44		5.697793			
1	0	13	50	12	1	4	52		5.698006			
2	0	14	55	18	1	3	58		5.698223			
3	0	16	0	20	1	3	2		5.698447			
4	0	17	5	16	1	2	6		5.698676			
5	0	18	10	9	1	1	8		5.698911			
6	0	19	14	59	1	0	9		5.699153			
7	0	20	19	44	0	59	9		5.699399			
8	0	21	24	24	0	58	7		5.699650			
9	0	22	28	59	0	57	5		5.699906			
10	0	23	33	31	0	56	1		5.700167			
11	0	24	37	57	0	54	56		5.700435			
12	0	25	42	19	0	53	50		5.700706			
13	0	26	46	36	0	52	44		5.700982			
14	0	27	50	46	0	51	36		5.701264			
15	0	28	54	53	0	50	27		5.701549			
16	0	29	38	55	0	49	17		5.701839			
17	1	1	2	52	0	48	6		5.702133			
18	1	2	6	43	0	46	54		5.702432			
19	1	3	10	29	0	45	41		5.702735			
20	1	4	14	10	0	44	28		5.703041			
21	1	5	17	45	0	43	14		5.703351			
22	1	6	21	15	0	41	59		5.703665			
23	1	7	24	40	0	40	43		5.703982			
24	1	8	27	58	0	39	26		5.704302			
25	1	9	31	10	0	38	9		5.704626			
26	1	10	34	17	0	36	51		5.704954			
27	1	11	37	19	0	35	33		5.705284			
28	1	12	40	14	0	34	14		5.705617			
29	1	13	43	5	0	32	54		5.705954			
30	1	14	45	49	0	31	34		5.706293			

Mean Anom.	Sign 8.											
	Longit. 14 from 1 * ♄				Southern Inc.				Dist. from ☉ curr.			
0	s	o	/	//	o	/	//		Logarithm.			
0	1	14	45	49	0	31	34		5.706293			
1	1	15	48	28	0	30	13		5.706634			
2	1	16	51	0	0	28	52		5.706978			
3	1	17	53	26	0	27	31		5.707324			
4	1	18	55	46	0	26	9		5.707672			
5	1	19	58	0	0	24	46		5.708023			
6	1	21	0	9	0	23	23		5.708376			
7	1	22	2	11	0	22	0		5.708729			
8	1	23	4	7	0	20	37		5.709085			
9	1	24	5	57	0	19	13		5.709443			
10	1	25	7	41	0	17	49		5.709820			
11	1	26	9	18	0	16	25		5.710162			
12	1	27	10	51	0	15	1		5.710524			
13	1	28	12	16	0	13	37		5.710887			
14	1	29	13	35	0	12	12		5.711250			
15	2	0	14	48	0	10	48		5.711614			
16	2	1	15	55	0	9	23		5.711978			
17	2	2	16	56	0	7	58		5.712344			
18	2	3	17	51	0	6	34		5.712711			
19	2	4	18	39	0	5	9		5.713078			
20	2	5	19	21	0	3	44		5.713444			
21	2	6	19	57	0	2	20		5.713810			
22	2	7	20	27	0	0	55		5.714178			
23	2	8	20	51	Nor.	0	29		5.714545			
24	2	9	21	8	0	1	53		5.714911			
25	2	10	21	20	0	3	17		5.715278			
26	2	11	21	25	0	4	41		5.715644			
27	2	12	21	25	0	6	5		5.716008			
28	2	13	21	18	0	7	28		5.716373			
29	2	14	21	5	0	8	51		5.716737			
30	2	15	20	46	0	10	14		5.717099			

Mean Anom.	Sign 9.											
	Longit. 14 from 1 * ♄				Northern Inc.				Dist. from ☉ curr.			
0	s	o	/	//	o	/	//		Logarithm.			
0	2	15	20	46	0	10	14		5.717099			
1	2	16	20	21	0	11	36		5.717462			
2	2	17	19	50	0	12	58		5.717823			
3	2	18	19	14	0	14	20		5.718182			
4	2	19	18	31	0	15	41		5.718540			
5	2	20	17	44	0	17	2		5.718898			
6	2	21	16	49	0	18	23		5.719253			
7	2	22	15	49	0	19	43		5.719607			
8	2	23	14	43	0	21	2		5.719959			
9	2	24	13	31	0	22	21		5.720309			
10	2	25	12	14	0	23	40		5.720658			
11	2	26	10	52	0	24	58		5.721005			
12	2	27	9	23	0	26	15		5.721349			
13	2	28	7	49	0	27	32		5.721691			
14	2	29	6	9	0	28	48		5.722031			
15	3	0	4	24	0	30	4		5.722368			
16	3	1	2	34	0	31	19		5.722704			
17	3	2	0	38	0	32	33		5.723038			
18	3	2	58	37	0	33	47		5.723367			
19	3	3	56	30	0	35	0		5.723694			
20	3	4	54	19	0	36	12		5.724020			
21	3	5	52	2	0	37	24		5.724342			
22	3	6	49	40	0	38	35		5.724661			
23	3	7	47	13	0	39	45		5.724977			
24	3	8	44	41	0	40	54		5.725290			
25	3	9	42	4	0	42	3		5.725601			
26	3	10	39	23	0	43	10		5.725906			
27	3	11	36	36	0	44	17		5.726209			
28	3	12	33	45	0	45	23		5.726510			
29	3	13	30	49	0	46	29		5.726806			
30	3	14	27	49	0	47	33		5.727099			

Mean Anom.	Sign 10.											
	Longit. 14 from ♄ * ♄				Northern Inc.			Dist. from ☉ curr.				
°	s	°	'	''	°	'	''	Logarithm.				
0	3	14	27	49	0	47	33	5. 727099				
1	3	15	24	42	0	48	37	5. 727390				
2	3	16	21	33	0	49	39	5. 727676				
3	3	17	18	18	0	50	41	5. 727958				
4	3	18	15	0	0	51	42	5. 728236				
5	3	19	11	36	0	52	42	5. 728510				
6	3	20	8	9	0	53	41	5. 728781				
7	3	21	4	38	0	54	39	5. 729047				
8	3	22	1	2	0	55	36	5. 729310				
9	3	23	57	22	0	56	32	5. 729568				
10	3	24	53	38	0	57	27	5. 729823				
11	3	24	49	51	0	58	21	5. 730073				
12	3	25	45	59	0	59	14	5. 730320				
13	3	26	42	4	1	0	6	5. 730563				
14	3	27	38	6	1	0	58	5. 730800				
15	3	28	34	3	1	1	48	5. 731032				
16	3	29	29	57	1	2	37	5. 731261				
17	4	0	25	47	1	3	25	5. 731485				
18	4	1	21	34	1	4	12	5. 731705				
19	4	2	17	18	1	4	58	5. 731920				
20	4	3	12	58	1	5	43	5. 732132				
21	4	4	8	35	1	6	26	5. 732337				
22	4	5	4	10	1	7	9	5. 732538				
23	4	5	59	41	1	7	51	5. 732734				
24	4	6	55	8	1	8	31	5. 732927				
25	4	7	50	34	1	9	11	5. 733113				
26	4	8	45	56	1	9	49	5. 733295				
27	4	9	41	16	1	10	26	5. 733473				
28	4	10	36	33	1	11	2	5. 733645				
29	4	11	31	47	1	11	37	5. 733812				
30	4	12	26	58	1	12	11	5. 733974				

TABLE of the Heliocentrick Place of *Jupiter*.

Mean Anom.	Sign. 11.		
	Longit. $\frac{1}{2}$ from $1^{\circ} \ast \gamma$	Northern Inc.	Dist. from \odot curr.
0	s o / //	o / //	Logarithm.
0	4 12 26 58	1 12 11	5. 733974
1	4 13 22 7	1 12 43	5. 734131
2	4 14 17 14	1 13 15	5. 734283
3	4 15 12 19	1 13 45	5. 734430
4	4 16 7 21	1 14 14	5. 734572
5	4 17 2 23	1 14 42	5. 734708
6	4 17 57 20	1 15 9	5. 734841
7	4 18 52 17	1 15 35	5. 734968
8	4 19 47 12	1 16 0	5. 735089
9	4 20 42 4	1 16 23	5. 735206
10	4 21 36 55	1 16 45	5. 735317
11	4 22 31 45	1 17 6	5. 735422
12	4 23 26 32	1 17 26	5. 735522
13	4 24 21 19	1 17 45	5. 735617
14	4 25 16 4	1 18 2	5. 735706
15	4 26 10 48	1 18 8	5. 735791
16	4 27 5 30	1 18 33	5. 735870
17	4 28 0 11	1 18 47	5. 735944
18	4 28 54 52	1 19 0	5. 736011
19	4 29 39 31	1 19 11	5. 736074
20	5 0 44 9	1 19 21	5. 736131
21	5 1 38 47	1 19 31	5. 736183
22	5 2 33 24	1 19 38	5. 736229
23	5 3 28 0	1 19 45	5. 736271
24	5 4 22 35	1 19 50	5. 736307
25	5 5 17 10	1 19 55	5. 736337
26	5 6 11 45	1 19 58	5. 736361
27	5 7 6 20	1 19 59	5. 736380
28	5 8 0 54	1 20 0	5. 736394
29	5 8 55 28	1 19 59	5. 736402
30	5 9 50 2	1 19 58	5. 736406

TABLE of the mean Motion of *Mars*, from the *Aphelion*.

Years of Christ current.	Anomaly of δ	In the Years	Mot. of the Anom.
s o / //	s o / //	s o / //	s o / //
1501	9 2 3 36	1	6 11 16 22
1581	3 7 33 36	2	0 21 32 43
1601	9 19 51 12	3	7 3 49 5
1621	5 7 55 36	4	1 15 36 53
1641	0 26 0 0	5	7 26 53 14
1661	8 14 4 24	6	2 8 9 30
1681	4 2 8 48	7	8 19 25 58
1701	11 20 13 12	8	3 1 13 46
1721	7 8 17 36	9	9 12 30 7
1741	2 26 22 0	10	3 23 46 29
1761	10 14 26 24	11	10 5 2 50
1781	6 2 30 48	12	4 16 50 38
1801	1 20 35 12	13	10 28 7 0
1821	9 8 39 36	14	5 9 23 22
1841	11 9 1 36	15	11 20 30 43
1861	1 9 23 36	16	6 2 27 31
In the Years	Motion of the Anomaly.	17	0 13 43 53
20	7 18 4 24	18	6 25 0 14
40	3 6 8 48	19	1 6 16 36
		20	7 18 4 24
60	10 24 13 12	Months of the common Year	Mot. of the Anom.
80	6 12 17 36		s o / //
100	2 0 22 0	January	0 0 0 0
200	4 0 44 0	February	0 16 14 42
300	6 1 6 0	March	1 0 55 5
400	8 1 28 0	April	1 17 9 47
500	10 1 50 0	May	2 2 53 3
600	0 2 12 0	June	2 19 7 45
700	2 2 34 0	July	3 4 51 1
800	4 2 56 0	August	3 21 5 43
900	6 3 18 0	September	4 7 20 26
1000	8 3 40 0	October	4 23 3 41
2000	4 7 20 0	November	5 9 18 24
3000	0 11 0 0	December	5 25 1 39
4000	8 14 40 0	In the Bissextile Year, after February, add a Day, and the Motion of a Day.	
5000	4 18 20 0		
6000	0 22 0 0		

TABLE of the mean Motion of *Mars* from the *Aphelion*.

Days.	Mot. of the Anomaly.		Motion of the Anom.		Motion of the Anom.
	s o / //	H.	s o / //	H.	s o / //
1	0 31 27	1	1 19 31	0 40 37	
2	1 2 53	2	2 37 32	0 41 55	
3	1 34 20	3	3 56 33	0 43 14	
4	2 5 46	4	5 14 34	0 44 33	
5	2 37 13	5	6 33 35	0 45 51	
6	3 8 39	6	7 52 36	0 47 10	
7	3 40 6	7	9 10 37	0 48 28	
8	4 11 32	8	10 29 38	0 49 47	
9	4 42 59	9	11 47 39	0 51 6	
10	5 14 25	10	13 6 40	0 52 24	
11	5 45 52	11	14 25 41	0 53 43	
12	6 17 18	12	15 43 42	0 55 1	
13	6 48 45	13	17 2 43	0 56 20	
14	7 20 11	14	18 20 44	0 57 39	
15	7 51 38	15	19 39 45	0 58 57	
16	8 23 4	16	20 58 46	1 0 16	
17	8 54 31	17	22 16 47	1 1 34	
18	9 25 57	18	23 35 48	1 2 53	
19	9 57 24	19	24 53 49	1 4 12	
20	10 28 50	20	26 12 50	1 5 30	
21	11 0 17	21	27 31 51	1 6 49	
22	11 31 44	22	28 49 52	1 8 7	
23	12 3 10	23	30 8 53	1 9 26	
24	12 34 37	24	31 27 54	1 10 45	
25	13 0 3	25	32 45 55	1 12 3	
26	13 37 30	26	34 4 56	1 13 22	
27	14 8 56	27	35 22 57	1 14 40	
28	14 40 23	28	36 41 58	1 15 59	
29	15 11 49	29	38 0 59	1 17 18	
30	15 43 16	30	39 18 60	1 18 36	

Long. of the Aph. δ from $1^{\circ} \ast \gamma$ 4 12 0
 Longit. δ from the $1^{\circ} \ast \gamma$ 0 10 0
 Inclination of the Orbit δ 1 52 0
 Mean Distance δ from \odot 152369
 Eccentricity 14100

TABLE of the Heliocentrick Place of *Mars*.

Mean Anom.	Sign. o.		
	Longit. δ from $1^{\circ} \ast \gamma$	Northern Inc.	Dist. from \odot curr.
0	s o / //	o / //	Logarithm.
0	4 1 12 22	1 49 32	5. 221113
1	4 2 2 27	1 49 11	5. 221110
2	4 2 52 32	1 48 49	5. 221098
3	4 3 42 37	1 48 25	5. 221076
4	4 4 32 42	1 48 0	5. 221044
5	4 5 22 47	1 47 33	5. 221003
6	4 6 12 53	1 47 5	5. 220953
7	4 7 3 1	1 46 36	5. 220894
8	4 7 53 8	1 46 5	5. 220826
9	4 8 43 17	1 45 33	5. 220748
10	4 9 33 27	1 44 59	5. 220661
11	4 10 23 38	1 44 24	5. 220565
12	4 11 13 51	1 43 48	5. 220460
13	4 12 4 6	1 43 11	5. 220345
14	4 12 54 22	1 42 32	5. 220221
15	4 13 44 39	1 41 52	5. 220088
16	4 14 34 58	1 41 10	5. 219946
17	4 15 25 19	1 40 27	5. 219795
18	4 16 15 43	1 39 43	5. 219634
19	4 17 6 8	1 38 57	5. 219464
20	4 17 56 37	1 38 11	5. 219285
21	4 18 47 8	1 37 22	5. 219097
22	4 19 37 40	1 36 33	5. 218900
23	4 20 28 17	1 35 42	5. 218694
24	4 21 18 56	1 34 50	5. 218478
25	4 22 9 38	1 33 57	5. 218254
26	4 23 0 24	1 33 2	5. 218020
27	4 23 51 12	1 32 6	5. 217777
28	4 24 42 4	1 31 9	5. 217526
29	4 25 32 59	1 30 11	5. 217267
30	4 26 23 59	1 29 11	5. 216997

TABLES of the Heliocentrick Place of *Mars*.

Mean Anom	Sign. 1.							
	Long. δ fr. 1 * γ				North inc.		Dif. fr. \odot cur.	
o	s	o	'	"	o	'	Logarithm.	
o	04	26	23	59	01	29	11	5. 216997
1	04	27	15	02	01	28	10	5. 216719
2	04	28	06	09	01	27	08	5. 216433
3	04	28	57	20	01	26	04	5. 216137
4	04	29	48	34	01	25	00	5. 215832
5	05	00	39	54	01	23	54	5. 215519
6	05	01	31	18	01	22	47	5. 215197
7	05	02	22	47	01	21	39	5. 214866
8	05	03	14	20	01	20	29	5. 214527
9	05	04	05	58	01	19	18	5. 214179
10	05	04	57	41	01	18	06	5. 213823
11	05	05	49	29	01	16	53	5. 213458
12	05	06	41	22	01	15	39	5. 213084
13	05	07	33	21	01	14	24	5. 212702
14	05	08	25	26	01	13	07	5. 212312
15	05	09	17	36	01	11	49	5. 211914
16	05	10	09	52	01	10	30	5. 211507
17	05	11	02	13	01	09	10	5. 211092
18	05	11	54	41	01	07	49	5. 210668
19	05	12	47	15	01	06	27	5. 210237
20	05	13	39	55	01	05	03	5. 209798
21	05	14	32	42	01	03	39	5. 209351
22	05	15	25	35	01	02	13	5. 208896
23	05	16	18	35	01	00	47	5. 208433
24	05	17	11	41	00	59	19	5. 207962
25	05	18	04	55	00	57	50	5. 207484
26	05	18	58	15	00	56	21	5. 206998
27	05	19	51	43	00	54	50	5. 206504
28	05	20	45	19	00	53	18	5. 206003
29	05	21	39	02	00	51	45	5. 205495
30	05	22	32	53	00	50	12	5. 204979

Mean Anom.	Sign. 2.									
	Long. δ fr. 1 * γ				North inc.			Dif. fr. \odot cur.		
o	s	o	'	"	o	'	"	Logarithm.		
o	05	22	32	53	00	50	12	5. 204979		
1	05	23	26	51	00	48	37	5. 204456		
2	05	24	20	57	00	47	01	5. 203925		
3	05	25	15	12	00	45	25	5. 203388		
4	05	26	09	34	00	43	47	5. 202844		
5	05	27	04	04	00	42	09	5. 202292		
6	05	27	58	42	00	40	30	5. 201734		
7	05	28	53	29	00	38	49	5. 201169		
8	05	29	48	25	00	37	08	5. 200598		
9	06	00	43	30	00	35	26	5. 200020		
10	06	01	38	44	00	33	44	5. 199436		
11	06	02	34	07	00	32	00	5. 198846		
12	06	03	29	39	00	30	16	5. 198249		
13	06	04	25	21	00	28	31	5. 197646		
14	06	05	21	12	00	26	45	5. 197038		
15	06	06	17	11	00	24	58	5. 196424		
16	06	07	13	21	00	23	11	5. 195804		
17	06	08	09	41	00	21	23	5. 195178		
18	06	09	06	10	00	19	35	5. 194546		
19	06	10	02	49	00	17	45	5. 193909		
20	06	10	59	38	00	15	56	5. 193267		
21	06	11	56	38	00	14	05	5. 192620		
22	06	12	53	48	00	12	14	5. 191969		
23	06	13	51	09	00	10	23	5. 191313		
24	06	14	48	39	00	08	31	5. 190652		
25	06	15	46	21	00	06	38	5. 189987		
26	06	16	44	13	00	04	45	5. 189318		
27	06	17	42	16	00	02	52	5. 188644		
28	06	18	40	29	00	00	58	5. 187966		
29	06	19	38	54	South	00	57	5. 187285		
30	06	20	37	31	00	02	51	5. 186600		

Mean Anom	Sign. 3.							
	Long. δ fr. 1 * γ				South. inc.			Dif. fr. \odot cur.
o	s	o	'	"	o	'	"	Logarithm.
o	06	20	37	31	00	02	51	5. 186600
1	06	21	36	18	00	04	46	5. 185911
2	06	22	35	17	00	06	41	5. 185219
3	06	23	34	27	00	08	37	5. 184525
4	06	24	33	48	00	10	32	5. 183827
5	06	25	33	21	00	12	28	5. 183127
6	06	26	33	07	00	14	24	5. 182424
7	06	27	33	03	00	16	20	5. 181719
8	06	28	33	12	00	18	16	5. 181012
9	06	29	33	32	00	20	13	5. 180302
10	07	00	34	05	00	22	09	5. 179592
11	07	01	34	49	00	24	05	5. 178880
12	07	02	35	45	00	26	01	5. 178167
13	07	03	36	55	00	27	57	5. 177452
14	07	04	38	15	00	29	53	5. 176737
15	07	05	39	48	00	31	49	5. 176021
16	07	06	41	34	00	33	44	5. 175305
17	07	07	43	31	00	35	39	5. 174589
18	07	08	45	41	00	37	34	5. 173872
19	07	09	48	03	00	39	29	5. 173156
20	07	10	50	38	00	41	23	5. 172442
21	07	11	53	25	00	43	17	5. 171728
22	07	12	56	24	00	45	10	5. 171015
23	07	13	59	37	00	47	02	5. 170304
24	07	15	03	02	00	48	54	5. 169594
25	07	16	06	39	00	50	46	5. 168886
26	07	17	10	29	00	52	37	5. 168180
27	07	18	14	31	00	54	27	5. 167478
28	07	19	18	46	00	56	16	5. 166777
29	07	20	23	13	00	58	04	5. 166079
30	07	21	27	53	00	59	52	5. 165385

Mean Anom.	Sign 4.									
	Longit. δ from 1 * γ				Southern Inc.			Diff. from \odot curr.		
o	s	o	'	''	o	'	''	Logarithm.		
o	7	21	27	53	1	59	52	5. 165385		
1	7	22	32	44	1	01	38	5. 164695		
2	7	23	37	49	1	03	24	5. 164008		
3	7	24	43	05	1	05	08	5. 163326		
4	7	25	48	34	1	06	52	5. 162648		
5	7	26	54	16	1	08	34	5. 161976		
6	7	28	00	09	1	10	15	5. 161308		
7	7	29	06	15	1	11	55	5. 160645		
8	8	00	12	33	1	13	33	5. 159988		
9	8	01	19	03	1	15	11	5. 159337		
10	8	02	25	44	1	16	46	5. 158692		
11	8	03	32	37	1	18	21	5. 158054		
12	8	04	39	43	1	19	53	5. 157423		
13	8	05	47	00	1	21	25	5. 156798		
14	8	06	54	29	1	22	54	5. 156182		
15	8	08	02	08	1	24	22	5. 155573		
16	8	09	09	59	1	25	49	5. 154972		
17	8	10	18	01	1	27	13	5. 154379		
18	8	11	26	15	1	28	36	5. 153795		
19	8	12	34	39	1	29	56	5. 153220		
20	8	13	43	14	1	31	15	5. 152655		
21	8	14	51	59	1	32	32	5. 152099		
22	8	16	00	55	1	33	47	5. 151553		
23	8	17	10	02	1	35	00	5. 151017		
24	8	18	19	18	1	36	10	5. 150491		
25	8	19	28	44	1	37	18	5. 149976		
26	8	20	38	20	1	38	25	5. 149472		
27	8	21	48	06	1	39	28	5. 148979		
28	8	22	58	01	1	40	30	5. 148497		
29	8	24	08	04	1	41	29	5. 148028		
30	8	25	18	17	1	42	26	5. 147570		

TABLES of the Heliocentrick Place of *Mars*.

Mean Anom.	Sign 5.											
	Long. δ fr. 1 * γ				South Inc.				Dif. fr. \odot cur.			
0	s	o	/	//	o	/	//		Logarithm.			
0	8	25	18	17	1	42	26		5. 147570			
1	8	26	28	39	01	43	20		5. 147125			
2	8	27	39	9	01	44	12		5. 146692			
3	8	28	49	48	01	45	1		5. 146273			
4	9	0	0	34	01	45	48		5. 145866			
5	9	1	11	27	01	46	32		5. 145472			
6	9	2	22	29	01	47	14		5. 145093			
7	9	3	33	37	01	47	52		5. 144727			
8	9	4	44	53	01	48	28		5. 144375			
9	9	5	56	16	01	49	2		5. 144037			
10	9	7	7	44	01	49	32		5. 143713			
11	9	8	19	19	01	50	0		5. 143405			
12	9	9	31	0	01	50	25		5. 143110			
13	9	10	42	46	01	50	47		5. 142831			
14	9	11	54	38	01	51	6		5. 142567			
15	9	13	6	35	01	51	23		5. 142318			
16	9	14	18	36	01	51	36		5. 142085			
17	9	15	30	43	01	51	46		5. 141867			
18	9	16	42	53	01	51	54		5. 141666			
19	9	17	55	7	01	51	58		5. 141480			
20	9	19	7	25	01	52	0		5. 141309			
21	9	20	19	45	01	51	58		5. 141156			
22	9	21	32	9	01	51	54		5. 141018			
23	9	22	44	35	01	51	47		5. 140896			
24	9	23	57	4	01	51	37		5. 140791			
25	9	25	9	34	01	51	23		5. 140702			
26	9	26	22	6	01	51	7		5. 140629			
27	9	27	34	49	01	50	48		5. 140572			
28	9	28	47	13	01	50	26		5. 140533			
29	9	29	59	47	01	50	0		5. 140511			
30	10	1	12	22	01	49	32		5. 140505			

Mean Anom.	Sign 6.											
	Long. δ fr. 1 * γ				South Inc.				Dif. fr. \odot cur.			
0	s	o	/	//	o	/	//		Logarithm.			
0	10	1	12	22	1	49	32		5. 140505			
1	10	2	24	57	01	49	01		5. 140515			
2	10	3	37	31	01	48	27		5. 140541			
3	10	4	50	5	01	47	50		5. 140584			
4	10	6	2	38	01	47	11		5. 140645			
5	10	7	15	10	01	46	28		5. 140722			
6	10	8	27	40	01	45	43		5. 140815			
7	10	9	40	8	01	44	55		5. 140924			
8	10	10	52	34	01	44	4		5. 141049			
9	10	12	4	57	01	43	10		5. 141190			
10	10	13	17	26	01	42	14		5. 141348			
11	10	14	29	33	01	41	15		5. 141522			
12	10	15	41	46	01	40	13		5. 141711			
13	10	16	53	55	01	39	9		5. 141916			
14	10	18	6	0	01	38	2		5. 142137			
15	10	19	18	0	01	36	52		5. 142374			
16	10	20	29	56	01	35	41		5. 142626			
17	10	21	41	48	01	34	26		5. 142893			
18	10	22	53	33	01	33	10		5. 143174			
19	10	24	5	13	01	31	51		5. 143471			
20	10	25	16	46	01	30	29		5. 143783			
21	10	26	28	13	01	29	9		5. 144109			
22	10	27	39	34	01	27	40		5. 144449			
23	10	28	50	49	01	26	13		5. 144804			
24	11	0	1	55	01	24	43		5. 145172			
25	11	1	12	55	01	23	11		5. 145554			
26	11	2	23	48	01	21	37		5. 145950			
27	11	3	34	32	01	20	1		5. 146358			
28	11	4	45	9	01	18	24		5. 146779			
29	11	5	55	37	01	16	44		5. 147213			
30	11	7	5	56	01	15	3		5. 147659			

Mean Anom.	Sign 7.											
	Long. δ fr. 1 * γ				South Inc.				Dif. fr. \odot cur.			
0	s	o	/	//	o	/	//		Logarithm.			
0	11	7	5	56	1	15	3		5. 147659			
1	11	8	16	8	01	13	21		5. 148118			
2	11	9	26	10	01	11	36		5. 148589			
3	11	10	36	4	01	9	50		5. 149071			
4	11	11	45	47	01	8	3		5. 149564			
5	11	12	55	21	01	6	14		5. 150069			
6	11	14	4	46	01	4	24		5. 150585			
7	11	15	14	0	01	2	32		5. 151111			
8	11	16	23	5	01	0	39		5. 151647			
9	11	17	31	59	00	58	45		5. 152193			
10	11	18	40	42	00	56	50		5. 152749			
11	11	19	49	15	00	54	54		5. 153314			
12	11	20	57	37	00	52	57		5. 153888			
13	11	22	5	49	00	50	59		5. 154471			
14	11	23	13	50	00	49	0		5. 155063			
15	11	24	21	40	00	47	0		5. 155663			
16	11	25	29	18	00	45	0		5. 156271			
17	11	26	36	44	00	42	58		5. 156886			
18	11	27	43	59	00	40	56		5. 157509			
19	11	28	51	3	00	38	54		5. 158139			
20	11	29	57	54	00	36	51		5. 158776			
21	00	1	4	35	00	34	47		5. 159419			
22	00	2	11	3	00	32	43		5. 160068			
23	00	3	17	20	00	30	39		5. 160723			
24	00	4	23	24	00	28	35		5. 161383			
25	00	5	29	16	00	26	30		5. 162049			
26	00	6	34	56	00	24	25		5. 162719			
27	00	7	40	24	00	22	19		5. 163395			
28	00	8	45	40	00	20	14		5. 164075			
29	00	9	50	44	00	18	9		5. 164749			
30	00	10	55	34	00	16	4		5. 165446			

Mean Anom.	Sign 8.											
	Long. δ fr. 1 * γ						South Inc.			Dif. fr. \odot cur.		
o	s	o	/	//	o	/	//	Logarithm.				
o	o	10	55	34	o	16	4	5. 165446				
1	00	12	0	13	00	13	58	5. 166137				
2	00	13	4	39	00	11	53	5. 166832				
3	00	14	8	53	00	9	48	5. 167530				
4	00	15	12	54	00	7	43	5. 168230				
5	00	16	16	43	00	5	39	5. 168932				
6	00	17	20	19	00	3	35	5. 169638				
7	00	18	23	43	00	1	31	5. 170345				
8	00	19	26	54	North 0	33		5. 171053				
9	00	20	29	53	00	2	30	5. 171762				
10	00	21	32	40	00	4	39	5. 172473				
11	00	22	35	14	00	6	41	5. 173184				
12	00	23	37	36	00	8	43	5. 173897				
13	00	24	39	45	00	10	44	5. 174610				
14	00	25	41	42	00	12	44	5. 175323				
15	00	26	43	27	00	14	44	5. 176036				
16	00	27	45	1	00	16	43	5. 176748				
17	00	28	46	21	00	18	42	5. 177460				
18	00	29	47	30	00	20	39	5. 178171				
19	01	0	48	26	00	22	36	5. 178882				
20	01	1	49	11	00	24	32	5. 179590				
21	01	2	49	43	00	26	28	5. 180297				
22	01	3	50	3	00	28	22	5. 181003				
23	01	4	50	12	00	30	16	5. 181707				
24	01	5	50	9	00	32	8	5. 182409				
25	01	6	49	55	00	34	0	5. 183109				
26	01	7	49	28	00	35	51	5. 183806				
27	01	8	48	50	00	37	40	5. 184500				
28	01	9	48	1	00	39	29	5. 185191				
29	01	10	47	0	00	41	16	5. 1858 0				
30	01	11	45	47	00	43	3	5. 186566				

TABLES of the Heliocentrick Place of *Mars*.

Mean Anom.	Sign. 9.											
	Long. δ fr. 1 * γ				North inc.				Dif. fr. \odot cur.			
	s	o	i	"	o	i	"	"	Logarithm.			
0	01	11	45	47	00	43	03		5. 186566			
1	01	12	44	24	00	44	48		5. 187248			
2	01	13	42	50	00	46	33		5. 187926			
3	01	14	41	04	00	48	16		5. 188601			
4	01	15	39	09	00	49	58		5. 189272			
5	01	16	37	02	00	51	39		5. 189939			
6	01	17	34	45	00	53	18		5. 190601			
7	01	18	32	16	00	54	57		5. 191260			
8	01	19	29	37	00	56	34		5. 191913			
9	01	20	26	48	00	58	10		5. 192562			
10	01	21	23	48	00	59	45		5. 193206			
11	01	22	20	38	01	01	18		5. 193846			
12	01	23	17	18	01	02	51		5. 194480			
13	01	24	13	48	01	04	21		5. 195110			
14	01	25	10	09	01	05	51		5. 195733			
15	01	26	06	20	01	07	19		5. 196351			
16	01	27	02	21	01	08	46		5. 196964			
17	01	27	58	12	01	10	12		5. 197570			
18	01	28	53	55	01	11	36		5. 198172			
19	01	29	49	29	01	12	59		5. 198767			
20	02	00	44	53	01	14	21		5. 199355			
21	02	01	40	07	01	15	41		5. 199938			
22	02	02	35	13	01	17	00		5. 200514			
23	02	03	30	11	01	18	17		5. 201084			
24	02	04	24	59	01	19	33		5. 201648			
25	02	05	19	39	01	20	48		5. 202205			
26	02	06	14	11	01	22	01		5. 202755			
27	02	07	08	35	01	23	13		5. 203299			
28	02	08	02	51	01	24	23		5. 203835			
29	02	08	56	58	01	25	32		5. 204365			
30	02	09	50	57	01	26	40		5. 204887			

Mean Anom.	Sign. 10.											
	Long. δ fr. 1 * γ				North inc.				Dif. fr. \odot cur.			
	s	o	i	"	o	i	"	"	Logarithm.			
0	02	09	50	57	01	26	40		5. 204887			
1	02	10	44	49	01	27	46		5. 205402			
2	02	11	38	33	01	28	50		5. 205910			
3	02	12	32	10	01	29	53		5. 206411			
4	02	13	25	40	01	30	55		5. 206904			
5	02	14	19	02	01	31	55		5. 207390			
6	02	15	12	17	01	32	54		5. 207868			
7	02	16	05	25	01	33	52		5. 208339			
8	02	16	58	27	01	34	47		5. 208802			
9	02	17	51	21	01	35	42		5. 209257			
10	02	18	44	09	01	36	35		5. 209705			
11	02	19	36	50	01	37	26		5. 210144			
12	02	20	29	26	01	38	16		5. 210576			
13	02	21	21	55	01	39	05		5. 211000			
14	02	22	14	18	01	39	52		5. 211415			
15	02	23	06	35	01	40	37		5. 211823			
16	02	23	58	46	01	41	21		5. 212222			
17	02	24	50	52	01	42	04		5. 212613			
18	02	25	42	52	01	42	45		5. 212995			
19	02	26	34	47	01	43	25		5. 213369			
20	02	27	26	37	01	44	03		5. 213736			
21	02	28	18	21	01	44	40		5. 214094			
22	02	29	10	00	01	45	15		5. 214443			
23	03	00	01	35	01	45	49		5. 214783			
24	03	00	53	04	01	46	21		5. 215115			
25	03	01	44	29	01	46	52		5. 215438			
26	03	02	35	50	01	47	21		5. 215753			
27	03	03	27	06	01	47	49		5. 216059			
28	03	04	18	18	01	48	15		5. 216357			
29	03	05	09	26	01	48	40		5. 216645			
30	03	06	00	30	01	49	04		5. 216925			

TABLE of the mean Motion of *Venus*, from the *Aphelion*.

TABLE of the Heliocentrick Place of *Mars*.

Mean Anom.	Sign. 11.											
	Long. δ fr. 1 * γ				North. inc.				Dif. fr. \odot cur.			
	s	o	i	"	o	i	"	"	Logarithm.			
0	03	06	00	30	01	49	04		5. 216925			
1	03	06	51	30	01	49	26		5. 217196			
2	03	07	42	27	01	49	46		5. 217458			
3	03	08	33	19	01	50	05		5. 217710			
4	03	09	24	08	01	50	23		5. 217955			
5	03	10	14	55	01	50	39		5. 218191			
6	03	11	05	37	01	50	53		5. 218417			
7	03	11	56	17	01	51	07		5. 218635			
8	03	12	46	54	01	51	18		5. 218843			
9	03	13	37	28	01	51	29		5. 219042			
10	03	14	28	00	01	51	37		5. 219233			
11	03	15	18	29	01	51	45		5. 219415			
12	03	16	08	55	01	51	51		5. 219587			
13	03	16	59	19	01	51	55		5. 219750			
14	03	17	49	41	01	51	58		5. 219904			
15	03	18	40	02	01	52	00		5. 220048			
16	03	19	30	20	01	52	00		5. 220184			
17	03	20	20	36	01	51	59		5. 220311			
18	03	21	10	51	01	51	56		5. 220428			
19	03	22	01	04	01	51	52		5. 220536			
20	03	22	51	15	01	51	46		5. 220634			
21	03	23	41	26	01	51	39		5. 220724			
22	03	24	31	36	01	51	31		5. 220804			
23	03	25	21	43	01	51	21		5. 220875			
24	03	26	11	51	01	51	10		5. 220937			
25	03	27	01	57	01	50	57		5. 220990			
26	03	27	52	03	01	50	43		5. 221033			
27	03	28	42	08	01	50	27		5. 221067			
28	03	29	32	14	01	50	10		5. 221092			
29	04	00	22	18	01	49	52		5. 221107			
30	04	01	12	22	01	49	32		5. 221113			

Years of Christ current.	Anomaly of γ	In the Years	Mot. of the Anom.
1	4 3 48 55	1	7 14 46 38
1501	7 0 22 40	2	2 29 33 16
1581	7 14 35 40	3	10 14 19 54
1601	1 18 8 55	4	6

TABLE of the mean Motion of *Venus* from the *Aphelion*.

Days.	Mot. of the Anomaly.		Motion of the Anom.		Motion of the Anom.
	s o ' "				
1	0 1 36 8	H.	0 ' "	H.	0 ' "
2	0 3 12 15	/	/ " "	/	/ " "
3	0 4 48 23	1	0 4 0	31	2 4 10
4	0 6 24 31	2	0 8 1	32	2 8 10
5	0 8 0 38	3	0 12 1	33	2 12 11
6	0 9 36 46	4	0 16 1	34	2 16 11
7	0 11 12 54	5	0 20 2	35	2 20 11
8	0 12 40 1	6	0 24 2	36	2 24 11
9	0 14 25 9	7	0 28 2	37	2 28 12
10	0 16 1 17	8	0 32 3	38	2 32 12
11	0 17 37 24	9	0 36 3	39	2 36 12
12	0 19 13 32	10	0 40 3	40	2 40 13
13	0 20 49 40	11	0 44 4	41	2 44 13
14	0 22 25 47	12	0 48 4	42	2 48 13
15	0 24 1 55	13	0 52 4	43	2 52 14
16	0 25 33 3	14	0 56 4	44	2 56 14
17	0 27 14 10	15	1 0 5	45	3 0 14
18	0 28 50 18	16	1 4 5	46	3 4 15
19	1 0 26 26	17	1 8 5	47	3 8 15
20	1 2 2 33	18	1 12 6	48	3 12 15
21	1 3 38 41	19	1 16 6	49	3 16 16
22	1 5 14 40	20	1 20 6	50	3 20 16
23	1 6 50 56	21	1 24 7	51	3 24 16
24	1 8 27 4	22	1 28 7	52	3 28 17
25	1 10 3 12	23	1 32 7	53	3 32 17
26	1 11 39 19	24	1 36 8	54	3 36 17
27	1 13 15 27	25	1 40 8	55	3 40 18
28	1 14 51 35	26	1 44 9	56	3 44 18
29	1 16 27 42	27	1 48 9	57	3 48 18
30	1 18 3 50	28	1 52 9	58	3 52 19
31	1 19 39 58	29	1 56 9	59	3 56 19
32	1 21 16 5	30	2 0 10	60	4 0 10

Long. of the Aph. ♀ from ♄ * ♄ 9 5 0 0
Longit. ♂ ♀ from the ♄ * ♄ 1 15 16 0
Inclination of the Orbit ♀ ————— 3 24 0
Mean Distance ♀ from ☉ ————— 72333
Eccentricity ————— 517

TABLE of the Heliocentrick Place of *Venus*.

Mean Anom.	Sign 0.			Sign 0.			
	Long. ♀ fr. ♄ * ♄				South Inc.		Dif. fr. ☉ cur.
0	s	o	'	"	o	'	Logarithm.
0	9	4	57	1	2	35 37	4.861985
1	9	5	56	11	02	37 52	4.861971
2	9	6	55	21	02	40 4	4.861957
3	9	7	54	32	02	42 13	4.861941
4	9	8	53	42	02	44 20	4.861926
5	9	9	52	53	02	46 23	4.861909
6	9	10	52	5	02	48 23	4.861892
7	9	11	51	17	02	50 21	4.861874
8	9	12	50	29	02	52 15	4.861854
9	9	13	49	42	02	54 6	4.861834
10	9	14	48	55	02	55 55	4.861814
11	9	15	48	7	02	57 40	4.861793
12	9	16	47	20	02	59 22	4.861772
13	9	17	46	34	03	1 1	4.861750
14	9	18	45	48	03	2 36	4.861726
15	9	19	45	2	03	4 9	4.861703
16	9	20	44	17	03	5 38	4.861679
17	9	21	43	32	03	7 3	4.861654
18	9	22	42	48	03	8 26	4.861628
19	9	23	42	4	03	9 45	4.861602
20	9	24	41	20	03	11 1	4.861575
21	9	25	40	37	03	12 13	4.861548
22	9	26	39	55	03	13 22	4.861521
23	9	27	39	12	03	14 27	4.861492
24	9	28	38	31	03	15 29	4.861463
25	9	29	37	50	03	16 28	4.861434
26	10	0	37	9	03	17 23	4.861405
27	10	1	36	29	03	18 15	4.861375
28	10	2	35	50	03	19 3	4.861345
29	10	3	35	10	03	19 47	4.861315
30	10	4	34	31	03	20 28	4.861284

TABLES of the Heliocentrick Place of *Venus*.

Mean Anom.	Sign 1.			Sign 1.			
	Long. ♀ fr. ♄ * ♄				South Inc.		Dif. fr. ☉ cur.
0	s	o	'	"	o	'	Logarithm.
0	10	4	34	31	3	20 28	4.861284
1	10	5	33	53	03	21 5	4.861253
2	10	6	33	15	03	21 39	4.861221
3	10	7	32	38	03	22 9	4.861189
4	10	8	32	1	03	22 36	4.861155
5	10	9	31	25	03	22 59	4.861122
6	10	10	30	40	03	23 18	4.861088
7	10	11	30	14	03	23 34	4.861055
8	10	12	29	40	03	23 46	4.861021
9	10	13	29	6	03	23 54	4.860987
10	10	14	28	33	03	23 59	4.860952
11	10	15	28	0	03	24 0	4.860917
12	10	16	27	27	03	23 57	4.860882
13	10	17	26	56	03	23 41	4.860847
14	10	18	26	25	03	23 14	4.860811
15	10	19	25	51	03	23 28	4.860776
16	10	20	25	25	03	23 11	4.860740
17	10	21	24	50	03	22 50	4.860704
18	10	22	24	27	03	22 25	4.860668
19	10	23	23	59	03	21 57	4.860631
20	10	24	23	31	03	21 25	4.860594
21	10	25	23	4	03	20 50	4.860557
22	10	26	22	38	03	20 11	4.860520
23	10	27	22	12	03	19 29	4.860483
24	10	28	21	40	03	18 42	4.860446
25	10	29	21	22	03	17 53	4.860408
26	11	0	20	59	03	16 59	4.860371
27	11	1	20	35	03	16 2	4.860334
28	11	2	20	13	03	15 2	4.860295
29	11	3	19	51	03	13 58	4.860256
30	11	4	19	20	03	12 51	4.860218

Mean Anom.	Sign 2.			Sign 2.			
	Long. ♀ fr. ♄ * ♄				South Inc.		Dif. fr. ☉ cur.
0	s	o	'	"	o	'	Logarithm.
0	11	4	19	30	3	12 51	4.860218
1	11	5	19	9	03	11 40	4.860181
2	11	6	18	48	03	10 25	4.860142
3	11	7	18	29	03	9 7	4.860104
4	11	8	18	10	03	7 46	4.860065
5	11	9	17	52	03	6 21	4.860027
6	11	10	17	35	03	4 53	4.859988
7	11	11	17	18	03	3 22	4.859949
8	11	12	17	2	03	1 47	4.859910
9	11	13	16	46	03	0 9	4.859870
10	11	14	16	32	02	58 27	4.859831
11	11	15	16	17	02	56 43	4.859792
12	11	16	16	4	02	54 55	4.859753
13	11	17	15	51	02	53 4	4.859713
14	11	18	15	39	02	51 10	4.859673
15	11	19	15	27	02	49 12	4.859634
16	11	20	15	16	02	47 12	4.859594
17	11	21	15	6	02	45 8	4.859554
18	11	22	14	56	02	43 2	4.859514
19	11	23	14	47	02	40 52	4.859474
20	11	24	14	39	02	38 40	4.859434
21	11	25	14	31	02	36 24	4.859394
22	11	26	14	24	02	34 6	4.859353
23	11	27	14	18	02	31 45	4.859313
24	11	28	14	12	02	29 21	4.859273
25	11	29	14	7	02	26 54	4.859232
26	00	0	14	3	02	24 25	4.859192
27	00	1	13	59	02	21 53	4.859151
28	00	2	13	50	02	19 18	4.859110
29	00	3	13	54	02	16 41	4.859070
30	00	4	13	52	02	14 1	4.859029

TABLES of the Heliocentrick Place of *Venus*.

Mean Anom.	Sign 3.											
	Longit. ♀ from I * ♀				Southern Inc.			Dist. from ☉ curr.				
	°	'	"	'''	°	'	"	Logarithm.				
0	0	4	13	52	2	14	1	4. 859029				
1	0	5	13	51	2	11	19	4. 858988				
2	0	6	13	51	2	8	34	4. 858946				
3	0	7	13	50	2	5	47	4. 858905				
4	0	8	13	52	2	2	58	4. 858864				
5	0	9	13	54	2	0	6	4. 858823				
6	0	10	13	56	1	57	12	4. 858782				
7	0	11	13	59	1	54	16	4. 858740				
8	0	12	14	3	1	51	18	4. 858698				
9	0	13	14	7	1	48	17	4. 858657				
10	0	14	14	12	1	45	15	4. 858615				
11	0	15	14	18	1	42	11	4. 858573				
12	0	16	14	25	1	39	4	4. 858532				
13	0	17	14	32	1	35	56	4. 858490				
14	0	18	14	40	1	32	46	4. 858448				
15	0	19	14	49	1	29	35	4. 858406				
16	0	20	14	58	1	26	21	4. 858364				
17	0	21	15	8	1	23	6	4. 858321				
18	0	22	15	18	1	19	50	4. 858279				
19	0	23	15	30	1	16	31	4. 858236				
20	0	24	15	42	1	13	12	4. 858194				
21	0	25	15	55	1	9	51	4. 858152				
22	0	26	16	9	1	6	29	4. 858110				
23	0	27	16	24	1	3	5	4. 858068				
24	0	28	16	39	0	59	40	4. 858026				
25	0	29	16	54	0	56	34	4. 857983				
26	1	0	17	10	0	52	47	4. 857941				
27	1	1	17	27	0	49	19	4. 857898				
28	1	2	17	45	0	45	50	4. 857855				
29	1	3	18	4	0	42	21	4. 857813				
30	1	4	18	23	0	38	50	4. 857770				

Mean Anom.	Sign 4.											
	Longit. ♀ from I * ♀				Southern Inc.			Dist. from ☉ curr.				
	°	'	"	'''	°	'	"	Logarithm.				
0	1	4	18	23	0	38	50	4. 857770				
1	1	5	18	43	0	35	18	4. 857728				
2	1	6	19	4	0	31	46	4. 857685				
3	1	7	19	25	0	28	13	4. 857643				
4	1	8	19	48	0	24	40	4. 857601				
5	1	9	20	11	0	21	6	4. 857559				
6	1	10	20	34	0	17	32	4. 857516				
7	1	11	20	58	0	13	57	4. 857474				
8	1	12	21	22	0	10	22	4. 857433				
9	1	13	21	48	0	6	47	4. 857391				
10	1	14	22	14	0	3	12	4. 857350				
11	1	15	22	41	Nor. 0	24		4. 857308				
12	1	16	23	8	0	3	59	4. 857267				
13	1	17	23	37	0	7	35	4. 857226				
14	1	18	24	6	0	11	10	4. 857185				
15	1	19	24	36	0	14	45	4. 857143				
16	1	20	25	6	0	18	20	4. 857103				
17	1	21	25	37	0	21	55	4. 857062				
18	1	22	26	9	0	25	29	4. 857022				
19	1	23	26	42	0	29	3	4. 856981				
20	1	24	27	15	0	32	37	4. 856941				
21	1	25	27	49	0	36	9	4. 856902				
22	1	26	28	23	0	39	41	4. 856863				
23	1	27	28	58	0	43	13	4. 856824				
24	1	28	29	34	0	46	44	4. 856786				
25	1	29	30	10	0	50	13	4. 856748				
26	2	0	30	47	0	53	42	4. 856709				
27	2	1	31	24	0	57	10	4. 856672				
28	2	2	32	2	1	0	37	4. 856635				
29	2	3	32	41	1	4	3	4. 856598				
30	2	4	33	20	1	7	28	4. 856562				

Mean Anom.	Sign 5.											
	Longit. ♀ from I * ♀				Northern Inc.			Dist. from ☉ curr.				
	°	'	"	'''	°	'	"	Logarithm.				
0	2	4	33	20	1	7	28	4. 856562				
1	2	5	34	0	1	10	51	4. 856526				
2	2	6	34	42	1	14	13	4. 856491				
3	2	7	35	24	1	17	34	4. 856456				
4	2	8	36	5	1	20	53	4. 856422				
5	2	9	36	47	1	24	11	4. 856388				
6	2	10	37	30	1	27	27	4. 856354				
7	2	11	38	13	1	30	42	4. 856322				
8	2	12	38	58	1	33	55	4. 856290				
9	2	13	39	43	1	37	6	4. 856259				
10	2	14	40	28	1	40	15	4. 856228				
11	2	15	41	14	1	43	23	4. 856198				
12	2	16	42	0	1	46	29	4. 856169				
13	2	17	42	47	1	49	32	4. 856140				
14	2	18	43	33	1	52	34	4. 856112				
15	2	19	44	20	1	55	33	4. 856085				
16	2	20	45	8	1	58	31	4. 856058				
17	2	21	45	57	2	1	26	4. 856032				
18	2	22	46	46	2	4	19	4. 856007				
19	2	23	47	36	2	7	10	4. 855983				
20	2	24	48	25	2	9	58	4. 855960				
21	2	25	49	15	2	12	43	4. 855937				
22	2	26	50	6	2	15	27	4. 855915				
23	2	27	50	57	2	18	7	4. 855894				
24	2	28	51	48	2	20	46	4. 855875				
25	2	29	52	39	2	23	21	4. 855856				
26	3	0	53	30	2	25	54	4. 855838				
27	3	1	54	22	2	28	24	4. 855821				
28	3	2	55	15	2	30	51	4. 855805				
29	3	3	56	8	2	33	16	4. 855790				
30	3	4	57	1	2	35	37	4. 855776				

Mean Anom	Sign 6.									
	Longit. ♀ from I * ♀				Northern Inc.			Dist. from ☉ curr.		
°	s	•	/	//	°	/	//	Logarithm.		
0	3	4	57	1	2	35	37	4. 855776		
1	3	5	57	54	2	37	56	4. 855763		
2	3	6	58	48	2	40	12	4. 855751		
3	3	7	59	41	2	42	24	4. 855741		
4	3	9	0	35	2	44	34	4. 855731		
5	3	10	1	28	2	46	41	4. 855722		
6	3	11	2	22	2	48	44	4. 855715		
7	3	12	3	16	2	50	44	4. 855709		
8	3	13	4	11	2	52	41	4. 855704		
9	3	14	5	5	2	54	35	4. 855700		
10	3	15	5	59	2	56	25	4. 855698		
11	3	16	6	53	2	58	13	4. 855696		
12	3	17	7	48	2	59	56	4. 855696		
13	3	18	8	42	3	1	37	4. 855697		
14	3	19	9	37	3	3	14	4. 855699		
15	3	20	10	31	3	4	47	4. 855702		
16	3	21	11	25	3	6	17	4. 855707		
17	3	22	12	19	3	7	44	4. 855713		
18	3	23	13	13	3	9	7	4. 855720		
19	3	24	14	7	3	10	6	4. 855728		
20	3	25	15	0	3	11	42	4. 855737		
21	3	26	15	53	3	12	54	4. 855748		
22	3	27	16	47	3	14	3	4. 855760		
23	3	28	17	40	3	15	8	4. 855773		
24	3	29	18	33	3	16	9	4. 855788		
25	4	0	19	25	3	17	7	4. 855804		
26	4	1	20	18	3	18	1	4. 855821		
27	4	2	21	10	3	18	51	4. 855839		
28	4	3	22	2	3	19	38	4. 855859		
29	4	4	22	54	3	20	20	4. 855880		
30	4	5	23	45	3	20	59	4. 855903		

TABLES of the Heliocentrick Place of *Venus*.

Mean Anom.	Sign. 7.											
	Longit. ♀ from 1 * ♀				Northern Inc.			Diff. from ☉ curr.				
°	s	o	/	//	o	/	//	Logarithm.				
0	4	5	23	45	3	20	59	4. 855903				
1	4	6	24	35	3	21	34	4. 855927				
2	4	7	25	25	3	22	6	4. 855952				
3	4	8	26	15	3	22	33	4. 855978				
4	4	9	27	4	3	22	57	4. 856005				
5	4	10	27	53	3	23	17	4. 856934				
6	4	11	28	42	3	23	33	4. 856064				
7	4	12	29	30	3	23	46	4. 856095				
8	4	13	30	17	3	23	54	4. 856128				
9	4	14	31	3	3	23	59	4. 856161				
10	4	15	31	50	3	24	0	4. 856196				
11	4	16	32	35	3	23	57	4. 856232				
12	4	17	33	21	3	23	50	4. 856270				
13	4	18	34	5	3	23	40	4. 856308				
14	4	19	34	48	3	23	25	4. 856348				
15	4	20	55	32	3	23	7	4. 856389				
16	4	21	36	14	3	22	43	4. 856431				
17	4	22	36	55	3	22	20	4. 856474				
18	4	23	37	37	3	21	50	4. 856518				
19	4	24	38	16	3	21	17	4. 856563				
20	4	25	38	55	3	20	40	4. 856610				
21	4	26	39	34	3	19	59	4. 856657				
22	4	27	40	12	3	19	15	4. 856705				
23	4	28	40	48	3	18	27	4. 856754				
24	4	29	41	25	3	17	35	4. 856804				
25	5	0	42	0	3	16	40	4. 856856				
26	5	1	42	34	3	15	41	4. 856909				
27	5	2	43	8	3	14	38	4. 856962				
28	5	3	43	41	3	13	31	4. 857016				
29	5	4	44	13	3	12	22	4. 857071				
30	5	5	44	44	3	11	8	4. 857126				

Mean Anom.	Sign 8.											
	Longit. ♀ from 1 * ♀				Northern Inc.			Diff. from ☉ curr.				
°	s	o	/	//	o	/	//	Logarithm.				
0	5	5	44	44	2	11	8	4. 857126				
1	5	6	45	13	3	9	51	4. 857183				
2	5	7	45	42	3	8	31	4. 857241				
3	5	8	46	10	3	7	7	4. 857299				
4	5	9	46	37	3	5	39	4. 857358				
5	5	10	47	3	3	4	8	4. 857418				
6	5	11	47	28	3	2	34	4. 857478				
7	5	12	47	52	3	0	57	4. 857539				
8	5	13	48	15	2	59	16	4. 857600				
9	5	14	48	37	2	57	32	4. 857662				
10	5	15	48	58	2	55	44	4. 857725				
11	5	16	49	18	2	53	54	4. 857788				
12	5	17	49	37	2	52	0	4. 857852				
13	5	18	49	54	2	50	3	4. 857917				
14	5	19	50	11	2	48	3	4. 857982				
15	5	20	50	26	2	46	0	4. 858047				
16	5	21	50	41	2	43	53	4. 858112				
17	5	22	50	54	2	41	44	4. 858178				
18	5	23	51	6	2	39	32	4. 858244				
19	5	24	51	18	2	37	17	4. 858310				
20	5	25	51	28	2	34	59	4. 858377				
21	5	26	51	37	2	32	39	4. 858444				
22	5	27	51	44	2	30	15	4. 858511				
23	5	28	51	50	2	27	49	4. 858578				
24	5	29	51	57	2	25	20	4. 858646				
25	6	0	52	1	2	22	49	4. 858713				
26	6	1	52	4	2	20	15	4. 858780				
27	6	2	52	7	2	17	38	4. 858848				
28	6	3	52	7	2	14	59	4. 858915				
29	6	4	52	7	2	12	18	4. 858983				
30	6	5	52	6	2	9	34	4. 859050				

Mean Anom.	Sign 9.											
	Long. ♀ fr. 1 * ♀				North. inc.			Diff. fr. ☉ curr.				
°	s	o	/	//	o	/	//	Logarithm.				
0	6	5	52	6	02	9	34	4. 859050				
1	6	6	52	4	02	6	48	4. 859117				
2	6	7	52	0	02	4	0	4. 859184				
3	6	8	51	57	02	1	9	4. 859251				
4	6	9	51	51	01	58	16	4. 859318				
5	6	10	51	44	01	55	21	4. 859384				
6	6	11	51	37	01	52	25	4. 859451				
7	6	12	51	27	01	49	26	4. 859517				
8	6	13	51	17	01	46	25	4. 859582				
9	6	14	51	6	01	43	22	4. 859648				
10	6	15	50	54	01	40	17	4. 859712				
11	6	16	50	41	01	37	11	4. 859776				
12	6	17	50	27	01	34	3	4. 859840				
13	6	18	50	12	01	30	53	4. 859903				
14	6	19	49	56	01	27	42	4. 859966				
15	6	20	49	38	01	24	29	4. 860029				
16	6	21	49	19	01	21	15	4. 860091				
17	6	22	49	0	01	17	59	4. 860152				
18	6	23	48	40	01	14	42	4. 860212				
19	6	24	48	19	01	11	23	4. 860272				
20	6	25	47	56	01	8	4	4. 860331				
21	6	26	47	34	01	4	43	4. 860390				
22	6	27	47	10	01	1	21	4. 860448				
23	6	28	46	44	00	57	58	4. 860505				
24	6	29	46	18	00	54	34	4. 860561				
25	7	0	45	50	00	51	9	4. 860617				
26	7	1	45	22	00	47	43	4. 860671				
27	7	2	44	54	00	44	16	4. 860725				
28	7	3	44	24	00	40	49	4. 860778				
29	7	4	43	53	00	37	20	4. 860830				
30	7	5	43	21	00	33	52	4. 860881				

Mean Anom	Sign. 10.											
	Longit. ♀ from 1 * ♀				Northern Inc.			Diff. from ☉ curr.				
°	s	o	/	"	o	/	"	Logarithm.				
0	7	5	43	21	0	33	52	4. 860881				
1	7	6	42	49	0	30	22	4. 860931				
2	7	7	42	16	0	26	53	4. 860981				
3	7	8	41	42	0	23	22	4. 861030				
4	7	9	41	7	0	19	52	4. 861077				
5	7	10	40	32	0	16	21	4. 861123				
6	7	11	39	56	0	12	50	4. 861169				
7	7	12	39	19	0	9	18	4. 861213				
8	7	13	38	41	0	5	47	4. 861256				
9	7	14	38	2	0	2	15	4. 861299				
10	7	15	37	24	South 1		16	4. 861340				
11	7	16	36	44	0	4	48	4. 861380				
12	7	17	36	3	0	8	19	4. 861420				
13	7	18	35	22	0	11	50	4. 861458				
14	7	19	34	41	0	15	21	4. 861495				
15	7	20	33	58	0	18	52	4. 861530				
16	7	21	33	15	0	22	22	4. 861565				
17	7	22	32	32	0	25	52	4. 861599				
18	7	23	31	48	0	29	21	4. 861631				
19	7	24	31	3	0	32	50	4. 861663				
20	7	25	30	18	0	36	18	4. 861693				
21	7	26	29	33	0	39	46	4. 861722				
22	7	27	28	47	0	43	12	4. 861750				
23	7	28	28	2	0	46	38	4. 861777				
24	7	29	27	15	0	50	3	4. 861802				
25	8	0	26	27	0	53	27	4. 861827				
26	8	1	25	40	0	56	51	4. 861851				
27	8	2	24	51	1	0	13	4. 861873				
28	8	3	24	3	1	3	34	4. 861894				
29	8	4	23	14	1	6	54	4. 861914				
30	8	5	22	25	1	10	12	4. 861932				

TABLE of the Heliocentrick Place of *Venus*.

Mean Anom.	Sign. 11.											
	Long. ♀ fr. 1 * ♀						South inc.			Dif. fr. ☉ cur.		
0	s ° ' "						° ' "			Logarithm.		
0	08	05	22	25	01	10	12			4.861932		
1	08	06	21	46	01	13	30			4.861950		
2	08	07	20	47	01	16	46			5.861966		
3	08	08	19	57	01	20	00			4.861981		
4	08	09	19	07	01	23	13			4.861995		
5	08	10	18	17	01	26	25			4.862007		
6	08	11	17	26	01	29	35			4.862019		
7	08	12	16	36	01	32	44			4.862029		
8	08	13	15	45	01	35	51			4.862039		
9	08	14	14	54	01	38	56			4.862048		
10	08	15	14	03	01	41	59			4.862055		
11	08	16	13	12	01	45	01			4.862061		
12	08	17	12	20	01	48	01			4.862067		
13	08	18	11	29	01	50	58			4.862071		
14	08	19	10	38	01	53	54			4.862074		
15	08	20	09	46	01	56	48			4.862075		
16	08	21	08	54	01	59	40			4.862076		
17	08	22	08	03	02	02	29			4.862076		
18	08	23	07	12	02	05	16			4.862075		
19	08	24	06	20	02	08	02			4.862072		
20	08	25	05	28	02	10	44			4.862069		
21	08	26	04	37	02	13	25			4.862064		
22	08	27	03	46	02	16	03			4.862059		
23	08	28	02	55	02	18	39			4.862054		
24	08	29	02	04	02	21	12			4.862047		
25	09	00	01	13	02	23	43			4.862038		
26	09	01	00	22	02	26	11			4.862029		
27	09	01	59	32	02	28	37			4.862019		
28	09	02	58	41	02	31	00			4.862009		
29	09	03	57	51	02	33	20			4.861997		
30	09	04	57	01	02	35	37			4.861985		

TABLE of the mean Motion of *Mercury*, from the *Aphelion*.

Years of Christ current.	Anomaly of ♄				In the Years	Mot. of the Anom.			
	s	°	'	"		s	°	'	"
1	3	1	32	0	1	1	23	42	7
1501	3	9	2	0	2	3	17	24	14
1581	5	7	2	0	3	5	11	6	21
1601	5	21	32	0	4	7	8	54	0
1621	6	6	2	0	5	9	2	36	7
1641	6	20	32	0	6	10	26	18	14
1661	7	5	2	0	7	0	20	0	21
1681	7	19	32	0	8	2	17	48	0
1701	8	4	2	0	9	4	11	30	7
1721	8	18	32	0	10	6	5	12	14
1741	9	3	2	0	11	7	28	54	21
1761	9	17	32	0	12	9	26	42	0
1781	10	2	2	0	13	11	20	24	7
1801	10	16	32	0	14	1	14	6	14
1901	0	29	2	0	15	3	7	48	21
2001	3	11	32	0	16	5	5	36	0
In the Years	Motion of the Anomaly.				17	6	29	18	7
20	0	14	30	0	18	8	23	0	14
40	0	29	0	0	19	10	16	42	21
					20	0	14	30	0
60	1	13	30	0	Months of the common Year	Mot. of the Anom.			
80	1	28	0	0		s	°	'	"
100	2	12	30	0	January	0	0	0	0
200	4	25	0	0	February	4	6	51	44
300	7	7	30	0	March	8	1	26	52
400	9	20	0	0	April	0	8	18	36
500	0	2	30	0	May	4	11	4	48
600	2	15	0	0	June	8	17	56	33
700	4	27	30	0	July	0	20	42	45
800	7	10	0	0	August	4	27	34	29
900	9	22	30	0	September	9	4	26	14
1000	0	5	0	0	October	1	7	12	26
2000	0	10	0	0	November	5	14	4	10
3000	0	15	0	0	December	9	16	50	22
4000	0	20	0	0	In the Bissextile Year, after February, add a Day, and the Motion of a Day.				
5000	0	25	0	0					
6000	1	0	0	0					

TABLE of the mean Motion of *Mercury* from the *Aphelion*.

Days.	Mot. of the Anomaly.				H.	Motion of the Anom.				H.	Motion of the Anom.			
	s	°	'	"		s	°	'	"		s	°	'	"
1	0	4	5	32	H. /	0	16	14		H. /	0	16	14	
2	0	8	10	5		0	30	28			0	30	28	
3	0	12	16	37	1	0	30	42		31	5	37	9	
4	0	16	22	10	2	0	40	55		32	5	17	23	
5	0	20	27	42	3	0	51	9		33	5	33	37	
6	0	24	33	14	4	1	01	23		34	5	48	51	
7	0	28	38	47	5	1	11	37		35	5	58	5	
8	1	2	44	19	6	1	21	51		36	6	8	19	
9	1	6	49	52	7	1	32	5		37	6	18	32	
10	1	10	55	24	8	1	42	18		38	6	28	46	
11	1	15	0	56	9	1	52	32		39	6	39	0	
12	1	19	6	29	10	2	02	46		40	6	49	14	
13	1	23	12	1	11	2	13	0		41	6	59	28	
14	1	27	17	34	12	2	23	14		42	7	9	42	
15	2	1	23	6	13	2	33	28		43	7	19	46	
16	2	5	28	38	14	2	43	42		44	7	30	9	
17	2	9	34	11	15	2	53	55		45	7	40	23	
18	2	13	39	43	16	3	4	9		46	7	50	37	
19	2	17	45	16	17	3	14	23		47	8	0	51	
20	2	21	50	48	18	3	24	37		48	8	11	5	
21	2	25	56	20	19	3	34	51		49	8	21	19	
22	3	0	1	53	20	3	45	5		50	8	31	32	
23	3	4	7	25	21	4	15	46		51	8	41	46	
24	3	8	12	58	22	4	26	0		52	8	52	0	
25	3	12	18	30	23	4	36	14		53	9	2	14	
26	3	16	24	2	24	4	46	28		54	9	12	28	
27	3	20	29	35	25	4	56	42		55	9	22	42	
28	3	24	35	7	26	5	6	55		56	9	32	56	
29	3	28	40	40	27	5	16	9		57	9	43	9	
30	4	2	46	12	28	5	26	23		58	9	53	23	
31	4	6	51	44	29	5	36	37		59	10	3	37	
32	4	10	57	17	30	5	46	51		60	10	13	51	

Long. of the Aph. ♄ from 1 * ♀ 7 13 48 0
Longit. ☿ ♄ from the 1 * ♀ 0 15 42 0
Inclination of the Orbit ♄ 6 54 0
Mean Distance ♄ from ☉ 38710.
Eccentricity 7970

TABLE of the Heliocentrick Place of *Mercury*.

Mean Anom	Sign. o.											
	Long. ♄ fr. 1 * ♀								South. inc.			Dif. fr. ☉ cur.
°	s	°	'	"	°	'	"				Logarithm.	
°	07	13	37	38	03	14	38				6. 668435	
1	07	14	17	50	03	18	54				6. 668395	
2	07	14	58	04	03	23	9				6. 668340	
3	07	15	38	18	03	27	22				6. 668269	
4	07	16	18	34	03	31	34				6. 668184	
5	07	16	58	49	03	35	43				6. 668082	
6	07	17	39	06	03	39	51				6. 667963	
7	07	18	19	24	03	43	58				6. 667829	
8	07	18	59	45	03	48	2				6. 667678	
9	07	19	40	06	03	52	5				6. 667512	
10	07	20	20	29	03	56	6				6. 667330	
11	07	21	00	54	04	00	6				6. 667132	
12	07	21	41	21	04	04	3				6. 666918	
13	07	22	21	51	04	07	59				6. 666687	
14	07	23	02	23	04	11	53				6. 666441	
15	07	23	42	58	04	15	45				6. 666180	
16	07	24	23	35	04	19	34				6. 665904	
17	07	25	04	14	04	23	22				6. 665610	
18	07	25	44	58	04	27	9				6. 665301	
19	07	26	25	44	04	30	53				6. 664976	
20	07	27	06	34	04	34	35				6. 664636	
21	07	27	47	27	04	38	15				6. 664280	
22	07	28	28	25	04	41	53				6. 663908	
23	07	29	09	26	04	45	29				6. 663522	
24	07	29	50	31	04	49	3				6. 663119	
25	08	00	31	40	04	52	34				6. 662700	
26	08	01	12	54	04	59	4				6. 662266	
27	08	01	54	12	04	59	31				6. 661817	
28	08	02	35	35	05	02	56				6. 661351	
29	08	03	17	03	05	06	19				6. 660870	
30	08	03	58	36	05	09	40				6. 660373	

TABLES of the Heliocentrick Place of *Mercury*.

Mean Anom.	Sign. 1.									
	Long. & fr. 1 * 7				South. inc.			Diff. fr. ☉ cur.		
0	s	o	/	//	o	/	//	Logarithm.		
0	08	03	58	36	05	9	40	4. 660373		
1	08	4	40	16	05	12	58	4. 659860		
2	08	5	22	1	05	16	14	4. 659332		
3	08	6	3	51	05	19	27	4. 658789		
4	08	6	45	47	05	22	38	4. 658231		
5	08	7	27	50	05	25	47	4. 657656		
6	08	8	9	56	05	28	53	4. 657066		
7	08	8	52	15	05	31	57	4. 656459		
8	08	9	34	37	05	34	58	4. 655838		
9	08	10	17	6	05	37	57	4. 655201		
10	08	10	59	41	05	40	53	4. 654549		
11	08	11	42	24	05	43	46	4. 653882		
12	08	12	25	15	05	46	37	4. 653199		
13	08	13	8	15	05	49	25	4. 652500		
14	08	13	51	22	05	52	10	4. 651787		
15	08	14	34	37	05	54	52	4. 651059		
16	08	15	18	1	05	57	32	4. 650314		
17	08	16	1	53	06	0	8	4. 649555		
18	08	16	45	14	06	2	41	4. 648780		
19	08	17	29	4	06	5	12	4. 647989		
20	08	18	13	4	06	7	40	4. 647183		
21	08	18	57	15	06	10	4	4. 646363		
22	08	19	41	35	06	12	25	4. 645526		
23	08	20	26	5	06	14	44	4. 644674		
24	08	21	10	45	06	16	58	4. 643808		
25	08	21	55	36	06	19	10	4. 642925		
26	08	22	40	37	06	21	18	4. 642028		
27	08	23	25	50	06	23	23	4. 641115		
28	08	24	11	14	06	25	25	4. 640187		
29	08	24	56	51	06	27	22	4. 639244		
30	08	25	42	39	06	29	17	4. 638286		

Mean Anom.	Sign 2.									
	Long. & fr. 1 * 7				South Inc.			Diff. fr. ☉ cur.		
0	s	o	/	//	o	/	//	Logarithm.		
0	8	25	42	39	6	29	17	4. 638286		
1	8	26	28	39	06	31	7	4. 637312		
2	8	27	14	51	06	32	54	4. 636323		
3	8	28	1	17	06	34	37	4. 635320		
4	8	28	47	57	06	36	17	4. 634303		
5	8	29	34	39	06	37	52	4. 633270		
6	9	0	21	54	06	39	24	4. 632221		
7	9	1	9	14	06	40	51	4. 631158		
8	9	1	56	48	06	42	14	4. 630081		
9	9	2	44	37	06	43	33	4. 628988		
10	9	3	32	40	06	44	48	4. 627880		
11	9	4	21	0	06	45	59	4. 626757		
12	9	5	9	33	06	47	5	4. 625620		
13	9	5	58	22	06	48	6	4. 624469		
14	9	6	47	29	06	49	3	4. 623302		
15	9	7	36	51	06	49	55	4. 622121		
16	9	8	26	30	06	50	43	4. 620926		
17	9	9	16	26	06	51	25	4. 619717		
18	9	10	6	39	06	52	3	4. 618492		
19	9	10	57	10	06	52	36	4. 617253		
20	9	11	48	0	06	53	3	4. 616001		
21	9	12	39	7	06	53	25	4. 614734		
22	9	13	30	34	06	53	42	4. 613454		
23	9	14	22	20	06	53	53	4. 612159		
24	9	15	14	24	06	53	59	4. 610851		
25	9	16	6	49	06	53	59	4. 609529		
26	9	16	59	33	06	53	54	4. 608194		
27	9	17	52	38	06	53	42	4. 606845		
28	9	18	46	5	06	53	25	4. 605482		
29	9	19	39	52	06	53	1	4. 604107		
30	9	20	34	1	06	52	31	4. 602718		

Mean Anom.	Sign 3.									
	Long. & fr. 1 * 7				South Inc.			Diff. fr. ☉ cur.		
0	s	o	/	//	o	/	//	Logarithm.		
0	9	20	34	1	6	52	31	4. 602718		
1	9	21	28	31	06	51	55	4. 601318		
2	9	22	23	25	06	51	12	4. 599905		
3	9	23	18	40	06	50	23	4. 598478		
4	9	24	14	18	06	49	27	4. 597040		
5	9	25	10	20	06	48	25	4. 595590		
6	9	26	6	45	06	47	15	4. 594129		
7	9	27	3	34	06	45	58	4. 592655		
8	9	28	0	47	06	44	34	4. 591170		
9	9	28	58	26	06	43	2	4. 589674		
10	9	29	56	30	06	41	24	4. 588166		
11	10	0	54	59	06	39	37	4. 586648		
12	10	1	54	54	06	37	43	4. 585119		
13	10	2	53	14	06	35	41	4. 583581		
14	10	3	53	1	06	33	31	4. 582034		
15	10	4	53	16	06	31	12	4. 580478		
16	10	5	53	56	06	28	46	4. 578912		
17	10	6	55	5	06	26	11	4. 577338		
18	10	7	5	42	06	23	27	4. 575755		
19	10	8	5	46	06	20	35	4. 574164		
20	10	10	1	19	06	17	34	4. 572565		
21	10	11	4	21	06	14	24	4. 570960		
22	10	12	7	53	06	11	5	4. 569348		
23	10	13	11	54	06	7	36	4. 567730		
24	10	14	16	24	06	3	59	4. 566107		
25	10	15	21	24	06	0	12	4. 564479		
26	10	16	26	54	05	56	15	4. 562845		
27	10	17	3	55	05	54	9	4. 561207		
28	10	18	9	27	05	47	51	4. 559567		
29	10	19	14	30	05	43	26	4. 557924		
30	10	20	19	4	05	38	50	4. 556279		

Mean Anom	Sign 4.									
	Long. & fr. 1 * 7				South Inc.			Diff. fr. ☉ cur.		
n	s	o	/	//	n	/	//	Logarithm.		
0	10	20	54	4	5	38	50	4. 556279		
1	10	22	2	10	05	34	4	4. 554631		
2	10	23	10	48	05	29	7	4. 552984		
3	10	24	19	58	05	24	1	4. 551335		
4	10	25	29	39	05	18	44	4. 549687		
5	10	26	39	53	05	13	16	4. 548040		
6	10	27	50	40	05	7	38	4. 546395		
7	10	29	1	58	05	1	49	4. 544752		
8	11	0	13	49	04	55	50	4. 543114		
9	11	1	26	14	04	49	40	4. 541479		
10	11	2	39	12	04	43	19	4. 539849		
11	11	3	52	42	04	36	48	4. 538226		
12	11	5	6	46	04	30	6	4. 536608		
13	11	6	21	23	04	23	13	4. 534999		
14	11	7	36	32	04	16	10	4. 533397		
15	11	8	52	15	04	8	56	4. 531805		
16	11	10	8	31	04	1	31	4. 530225		
17	11	11	25	20	03	53	56	4. 528655		
18	11	12	42	42	03	46	11	4. 527097		
19	11	14	0	38	03	38	15	4. 525553		
20	11	15	19	5	03	30	8	4. 524023		
21	11	16	38	5	03	21	52	4. 522509		
22	11	17	57	38	03	13	26	4. 521011		
23	11	19	17	42	03	4	50	4. 519531		
24	11	20	38	18	02	56	4	4. 518069		
25	11	21	59	26	02	47	9	4. 516626		
26	11	23	21	5	02	38	4	4. 515205		
27	11	24	43	16	02	28	51	4. 513806		
28	11	26	5	58	02	19	29	4. 512430		
29	11	27	29	9	02	9	58	4. 511079		
30	11	28	52	50	02	0	20	4. 509752		

TABLES of the Heliocentrick Place of *Mercury*.

Mean Anom.	Sign 5.											
	Longit. ♄ from ♈ * ♎				Southern Inc.				Dist. from ☉ curr.			
	°	'	"	'''	°	'	"	'''	Logarithm.			
0	11	28	52	50	2	0	20		4.509752			
1	0	0	17	0	1	50	33		4.508451			
2	0	1	41	39	1	40	39		4.507179			
3	0	3	6	47	1	30	38		4.505935			
4	0	4	32	22	1	20	31		4.504721			
5	0	5	58	25	1	10	16		4.503537			
6	0	7	24	54	0	59	56		4.502386			
7	0	8	51	49	0	49	31		4.501268			
8	0	10	19	9	0	39	1		4.500185			
9	0	11	40	55	0	28	26		4.499137			
10	0	13	15	3	0	17	47		4.498126			
11	0	14	43	35	0	7	4		4.497152			
12	0	16	12	30	Nor. 3	41			4.496217			
13	0	17	41	45	0	14	29		4.495321			
14	0	19	11	21	0	25	19		4.494467			
15	0	20	41	16	0	36	10		4.493655			
16	0	22	11	30	0	47	2		4.492885			
17	0	23	42	2	0	57	54		4.492158			
18	0	25	12	50	1	8	45		4.491476			
19	0	26	43	54	1	19	35		4.490840			
20	0	28	15	13	1	30	24		4.490248			
21	0	29	46	45	1	41	10		4.489702			
22	1	1	18	30	1	51	54		4.489204			
23	1	2	50	26	2	2	33		4.488755			
24	1	4	22	32	2	13	9		4.488354			
25	1	5	54	47	2	23	39		4.488003			
26	1	7	27	10	2	34	4		4.487702			
27	1	8	59	41	2	44	23		4.487451			
28	1	10	32	16	2	54	36		4.487252			
29	1	12	4	55	3	4	41		4.487104			
30	1	13	37	38	3	14	38		4.487008			

Mean Anom.	Sign 6.											
	Longit. ♄ from ♈ * ♎				Northern Inc.				Dist. from ☉ curr.			
	°	'	"	'''	°	'	"	'''	Logarithm.			
0	1	13	37	38	3	14	38		4.487008			
1	1	15	10	23	3	24	27		4.486962			
2	1	16	43	8	3	34	7		4.486969			
3	1	18	15	52	3	43	36		4.487029			
4	1	19	48	35	3	52	56		4.487140			
5	1	21	21	14	4	2	5		4.487304			
6	1	22	53	48	4	11	3		4.487521			
7	1	24	26	17	4	19	50		4.487789			
8	1	25	58	40	4	28	24		4.488109			
9	1	27	30	55	4	36	46		4.488481			
10	1	29	3	0	4	44	55		4.488905			
11	2	0	34	53	4	52	51		4.489378			
12	2	2	6	36	5	0	33		4.489901			
13	2	3	38	6	5	8	1		4.490474			
14	2	5	9	21	5	15	15		4.491097			
15	2	6	40	21	5	22	14		4.491768			
16	2	8	11	5	5	28	58		4.492488			
17	2	9	41	32	5	35	27		4.493254			
18	2	11	11	38	5	41	42		4.494068			
19	2	12	41	26	5	47	40		4.494928			
20	2	14	10	54	5	53	23		4.495835			
21	2	15	40	0	5	58	51		4.496782			
22	2	17	8	43	6	4	3		4.497773			
23	2	18	37	2	6	8	58		4.498807			
24	2	20	4	58	6	13	38		4.499882			
25	2	21	32	28	6	18	3		4.500997			
26	2	22	59	32	6	22	11		4.502151			
27	2	24	26	8	6	26	3		4.503342			
28	2	25	52	17	6	29	40		4.504569			
29	2	27	17	57	6	33	1		4.505832			
30	2	28	43	10	6	36	7		4.507129			

Mean Anom.	Sign 7.											
	Longit. ♄ from ♈ * ♎				Northern Inc.				Dist. from ☉ curr.			
	°	'	"	'''	°	'	"	'''	Logarithm.			
0	3	28	43	10	6	36	7		4.507129			
1	3	0	7	52	6	38	57		4.508458			
2	3	1	32	3	6	41	32		4.509819			
3	3	2	55	40	6	43	51		4.511209			
4	3	4	18	56	6	45	56		4.512629			
5	3	5	41	33	6	47	46		4.514078			
6	3	7	3	38	6	49	21		4.515553			
7	3	8	25	9	6	50	42		4.517052			
8	3	9	46	9	6	51	48		4.518576			
9	3	11	6	34	6	52	41		4.520121			
10	3	12	26	25	6	53	20		4.521688			
11	3	13	45	44	6	53	46		4.523276			
12	3	15	4	28	6	53	59		4.524882			
13	3	16	22	36	6	53	58		4.526505			
14	3	17	40	10	6	53	45		4.528144			
15	3	18	57	10	6	53	20		4.529798			
16	3	20	13	35	6	52	43		4.531467			
17	3	21	29	23	6	51	54		4.533148			
18	3	22	44	37	6	50	54		4.534841			
19	3	23	59	16	6	49	43		4.536543			
20	3	25	13	19	6	48	21		4.538255			
21	3	26	26	48	6	46	48		4.539975			
22	3	27	39	42	6	45	6		4.541702			
23	3	28	52	1	6	43	13		4.543434			
24	4	0	3	45	6	41	11		4.545172			
25	4	1	14	55	6	38	59		4.546914			
26	4	2	25	30	6	36	39		4.548659			
27	4	3	35	30	6	34	9		4.550406			
28	4	4	44	56	6	31	32		4.552154			
29	4	5	53	48	6	28	46		4.553902			
30	4	7	2	8	6	25	52		4.555650			

Mean Anom.	Sign 8.											
	Longit. ♄ from ♈ * ♎				Northern Inc.				Dist. from ☉ curr.			
°	s	°	'	''	°	'	''	Logarithm.				
0	4	7	2	8	6	25	52	4. 555650				
1	4	8	9	53	6	22	51	4. 557396				
2	4	9	17	4	6	19	43	4. 559139				
3	4	10	23	44	6	16	27	4. 560881				
4	4	11	29	49	6	13	5	4. 562618				
5	4	12	35	23	6	9	36	4. 564352				
6	4	13	40	25	6	6	1	4. 566080				
7	4	14	44	54	6	2	20	4. 567801				
8	4	15	48	52	5	58	33	4. 569516				
9	4	16	52	21	5	54	41	4. 571225				
10	4	17	55	17	5	50	43	4. 572926				
11	4	18	57	44	5	46	41	4. 574619				
12	4	19	59	59	5	42	33	4. 576302				
13	4	21	1	5	5	38	21	4. 577977				
14	4	22	2	2	5	34	4	4. 579641				
15	4	23	2	30	5	29	44	4. 581295				
16	4	24	2	31	5	25	19	4. 582939				
17	4	25	2	3	5	20	50	4. 584570				
18	4	26	1	5	5	16	18	4. 586191				
19	4	26	59	42	5	11	42	4. 587801				
20	4	27	57	52	5	7	52	4. 589398				
21	4	28	55	35	5	2	21	4. 590983				
22	4	29	52	52	4	57	36	4. 592555				
23	5	0	49	41	4	52	48	4. 594113				
24	5	1	46	9	4	47	57	4. 595658				
25	5	2	42	9	4	43	4	4. 597188				
26	5	3	37	47	4	38	8	4. 598705				
27	5	4	32	57	4	33	10	4. 600207				
28	5	5	27	48	4	28	11	4. 601696				
29	5	6	22	14	4	23	9	4. 603169				
30	5	7	16	16	4	18	5	4. 604628				

TABLES of the Heliocentrick Place of *Mercury*.

Mean Anom.	Sign. 9.											
	Longit. ♄ from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	/	//	o	/	//	Logarithm.				
0	5	7	16	16	4	18	5	4. 604628				
1	5	8	9	56	4	13	0	4. 606072				
2	5	9	3	14	4	7	53	4. 607500				
3	5	9	56	10	4	2	44	4. 608914				
4	5	10	48	45	3	57	34	4. 610311				
5	5	11	40	58	3	52	23	4. 611693				
6	5	12	32	51	3	47	10	4. 613059				
7	5	13	24	24	3	41	57	4. 614408				
8	5	14	15	38	3	36	42	4. 615743				
9	5	15	6	31	3	31	27	4. 617060				
10	5	15	57	6	3	26	10	4. 618362				
11	5	16	47	23	3	20	53	4. 619647				
12	5	17	37	21	3	15	36	4. 620916				
13	5	18	27	0	3	10	17	4. 622168				
14	5	19	16	22	3	4	58	4. 623404				
15	5	20	5	27	2	59	39	4. 624623				
16	5	20	54	15	2	54	19	4. 625825				
17	5	21	42	47	2	48	59	4. 627011				
18	5	22	31	3	2	43	39	4. 628180				
19	5	23	19	3	2	38	18	4. 629332				
20	5	24	6	48	2	32	57	4. 630468				
21	5	24	54	17	2	27	36	4. 631587				
22	5	25	41	31	2	22	16	4. 632688				
23	5	26	28	31	2	16	55	4. 633772				
24	5	27	15	17	2	11	34	4. 634841				
25	5	28	1	48	2	6	13	4. 635892				
26	5	28	48	6	2	0	52	4. 636927				
27	5	29	34	12	1	55	32	4. 637943				
28	6	0	20	4	1	50	12	4. 638943				
29	6	1	5	43	1	44	52	4. 639927				
30	6	1	51	11	1	39	32	4. 640894				

Mean Anom.	Sign 10.											
	Longit. ♄ from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	/	//	o	/	//	Logarithm.				
0	6	1	51	11	1	39	32	4. 640894				
1	6	2	36	26	1	34	13	4. 641844				
2	6	3	21	30	1	28	54	4. 642777				
3	6	4	6	22	1	23	35	4. 643693				
4	6	4	51	3	1	18	17	4. 644592				
5	6	5	35	33	1	13	0	4. 645474				
6	6	6	19	53	1	7	43	4. 646340				
7	6	7	4	1	1	2	26	4. 647188				
8	6	7	48	0	0	57	10	4. 648019				
9	6	8	31	50	0	51	55	4. 648834				
10	6	9	15	31	0	46	40	4. 649632				
11	6	9	59	1	0	41	26	4. 650412				
12	6	10	42	23	0	36	13	4. 651177				
13	6	11	25	35	0	31	0	4. 651924				
14	6	12	8	39	0	25	48	4. 652655				
15	6	12	51	35	0	20	37	4. 653369				
16	6	13	34	23	0	15	26	4. 654066				
17	6	14	17	3	0	10	17	4. 654745				
18	6	14	59	36	0	5	8	4. 655410				
19	6	15	42	2	South	0	0	4. 656057				
20	6	16	24	20	0	5	7	4. 656688				
21	6	17	6	30	0	10	13	4. 657301				
22	6	17	48	35	0	15	19	4. 657899				
23	6	18	30	33	0	20	23	4. 658479				
24	6	19	12	26	0	25	27	4. 659044				
25	6	19	54	12	0	30	29	4. 659592				
26	6	20	35	52	0	35	31	4. 660123				
27	6	21	17	27	0	40	32	4. 660637				
28	6	21	58	56	0	45	31	4. 661134				
29	6	22	40	20	0	50	30	4. 661615				
30	6	23	21	40	0	55	27	4. 662081				

Mean Anom.	Sign. 11.											
	Longit. ♄ from 1 * ♄				Northern Inc.			Dist. from ☉ curr.				
0	s	o	/	//	o	/	//	Logarithm.				
0	6	23	21	40	0	55	27	4. 662081				
1	6	24	2	54	1	0	24	4. 662529				
2	6	24	44	4	1	5	19	4. 662961				
3	6	25	25	9	1	10	13	4. 663376				
4	6	26	6	10	1	15	6	4. 663775				
5	6	26	47	6	1	19	58	4. 664157				
6	6	27	28	0	1	24	49	4. 664524				
7	6	28	8	49	1	29	39	4. 664873				
8	6	28	49	35	1	34	27	4. 665206				
9	6	29	30	18	1	39	14	4. 665523				
10	7	0	10	58	1	44	0	4. 665824				
11	7	0	51	34	1	48	45	4. 666109				
12	7	1	32	8	1	53	29	4. 666377				
13	7	2	12	40	1	58	11	4. 666629				
14	7	2	53	8	2	2	52	4. 666865				
15	7	3	33	34	2	7	32	4. 667084				
16	7	4	13	59	2	12	10	4. 667287				
17	7	4	54	22	2	16	47	4. 667474				
18	7	5	34	44	2	21	23	4. 667646				
19	7	6	15	4	2	25	57	4. 667800				
20	7	6	55	21	2	30	30	4. 667939				
21	7	7	35	37	2	35	1	4. 668060				
22	7	8	15	53	2	39	31	4. 668166				
23	7	8	56	9	2	44	0	4. 668257				
24	7	9	36	22	2	48	27	4. 668330				
25	7	10	16	35	2	52	53	4. 668388				
26	7	10	56	48	2	57	17	4. 668429				
27	7	11	37	1	3	1	39	4. 668453				
28	7	12	17	13	3	6	0	4. 668463				
29	7	12	57	26	3	10	20	4. 668456				
30	7	13	37	38	3	14	38	4. 668435				

Calculus of the Place of the Moon in the Month of *March*, of the Year P. J. 4710.

		Mean Motion of the M.				Apog.				Node retrog.			
		s	o	'	"	s	o	'	"	s	o	'	"
Years of Christ	—	4	2	2	45	9	12	7	5	8	28	35	35
Before Christ	—	5	20	42	49	5	12	46	7	2	17	22	3
Remain.		10	11	19	56	3	29	21	1	11	15	57	38
March.	—	7	5	31	26	0	7	54	36	0	3	45	36
	Days			8	7	0	0	4	11	0	0	1	59
	H.			25	15				13				6
	Min.												
										0 3 47 41			
Mean Motion	—	5	26	30	44	4	7	20	1	11	12	9	57
Mean Anom. of the Sun		9	4	28	37	11	20	24	39	11	20	24	39
Physical Parts S.		0	0	11	27	True place of the S.				True place of the S.			
Place M. cor.	—	5	25	19	17	7	13	4	36	8	14	42	
Apog. substract	—	4	18	42	18	Argum. of the year				Dist. of the S. from the			
Mean Anom.	—	1	6	36	59	11	22	17		Node	27	49	
Equat. substract	—	0	3	37	17	Equat. add				Equat. add			
Place of the Equat. in the Orbit		5	21	42	0	4	18	42	18	11	12	37	46
True Place of the Sun		11	20	24	39	Place of the true Ap.				True place of the			
Distance from the Sun		6	1	17	21	great Eccentric				Node	5	17	37
Variat. add	—	0	0	1	43	66850				Inclin. of the Lim.			
True Place in the Orbit		5	21	43	43	True Eccentric							
Place of the Node	—	11	12	37	46	56016							
Argum. of Latitude	—	6	9	5	57	Mean 55237							
Reduct S.	—	0	0	2	16	Diff. 779							
True Place in the Eclipt.		5	21	41	27	Mean and great Diff.							
True southern Lat.		0	0	50	14	11617							

Horary Motion of the Moon	30	31.
Horary Motion of the Sun	2	27.
Horary Motion from the Sun	28	4.
1684: 60 :: 4744 : h 2 49.		
Whence the Time of the true Sizygy, was	h 12	57.

Calculus of the Place of the Moon, at the Time of the true Syzygy, A. P. J. 4710.

	Mean Motion of the M.				Apog.				Node retrogr.			
	s	o	'	"	s	o	'	"	s	o	'	"
Year of Christ	4	2	2	46	9	12	7	5	8	28	35	35
Before Christ	5	20	42	49	5	12	46	4	2	17	22	3
Remain	10	11	19	56	3	29	21	1	11	15	57	38
March.	7	5	31	26	0	7	54	36	0	3	45	36
		6	35	18			3	21			1	35
			31	18				16				8
									0	3	47	19
Mean Motion	5	23	57	48	4	7	19	14	11	12	10	19
Mean Anom. of the Sun	9	4	21	40	11	20	17	44	11	20	17	44
Physical Parts S.	0	0	11	27	True place of the S.				True place of the S.			
Place of the M. cor.	5	23	46	31	7	12	58	30	0	8	7	25
Apog. subt.	4	18	40	51	Argum. of the year				Dist. of the S. from the Node			
Mean Anom.	1	5	5	40	11	21	37		Equat. add. 27 26			
Equat. subt.	0	3	27	55	Equat. add.				11	12	37	45
Place of the Equat. in the Orbit	5	20	18	36	4	18	40	51	True place of the nod.			
True Place of the Sun	11	20	17	44	True place of the Ap.				5 17 37			
Distance of the M. from the S.	6	0	0	52	great Eccent. 66850				Inclinat. of the Limit:			
Variat. add	0	0	0	1	True 56057							
True Place in the Orbit	5	20	18	37	Mean 55237							
Node subt.	11	12	37	45	Diff. 820							
Argum. of Lat.	6	7	40	52	Mean and great Diff.							
Reduct. subt.	0	0	1	56	11617							
True Place in the Eclipt.	5	20	16	41								
True South Latit.	0	0	40	4								

Therefore the apparent Time of the true Sizygy in the Orbit, 12 h. 46' 16", the Reduction to be subtracted 4' 50", then the apparent Time of the lesser Distance of the Centres 12 h. 41' 6", or of *March*, 13°, a little after 12 at Noon, at the Meridian of *London*, but at the Meridian of *Jerusalem* the lesser Distance of the Centres, was 3 h. 21' 26" after Noon.

Horizont. parall. of the M.	55	18
— of the Sun to be add.	0	10
Sum.	55	28
Of the Semid. of the S. to be subst.	16	4
— Semid. of the Shadow,	39	24
— Semid. of the Moon,	14	59
Sum of both,	54	23
Equat. of Time to be added to the } former,	7	37
— to the latter,	3	7
Sum to be subtract. here	10	44
Sum of the Semid.	54	23
Dist. of the less. Centre	40	4
Diff.	14	19
14' 59" : 6 Dig. 14' 19", 5 Dig. 21, 54' 23", 10000, 40' 4" : 7367 = <i>Cosin</i> . 42° 33' = Angle of Incid. 10000 : 6762 :: 3263" : 2206" = to the Motion of the half Stay 1684" : 60' : 2206" : 49' = 1 h. 19' = to the Time of the half Stay; Angle of the Way seen with the Eclipt. 5. 43'.		

Calculus of the Place of the Moon in the Month of April, A. D. 1707.

		Mean Motion of the M.				Apog.				Nod. Retrog.				
		s	o	'	"	s	o	'	"	s	o	'	"	
Radix	1701.	10	15	19	50	11	8	18	20	4	27	24	20	
Years	6.	2	9	28	55	8	4	5	44					
April	Days 5.	5	21	45	27	0	10	35	2	3	26	1	29	
	H. 13.	0	7	8	14	0	0	3	37	0	5	1	51	
	Min. 46.	0	0	25	25	0	0	0	13	0	0	1	43	
										0	0	0	6	
										4	1	5	9	
Mean Motion		6	24	7	41	7	23	2	56	0	26	19	11	
Mean Anom. of the Sun		9	17	43	41	0	26	14	57	0	26	14	57	
Physical Parts S.		0	0	10	53	True Place of the Sun				True Place of the Sun				
Place M. cor.		6	23	56	48	5	3	12	1	11	29	55	46	
Apog. Subst.		7	14	42	23	Argum. of the Year				Dift. of S. fr. the Nod.				
Mean Anom.		11	9	14	25	8	20	33		0	0	5		
Equat. add.		0	2	21	0	Equat. Subst.				Equat. add.				
Place of the Equat. in the Orbit		6	26	17	48	7	14	42	23	26	19	16		
True Place of the Sun		0	26	14	57	True Place of Apog.				True Place of Nod.				
Distance from the Sun		6	0	2	51	Great Eccent. 66850				5				
Var. add.		0	0	0	1	True				Inclin. of the Lim.				
True Place in the Orbit		6	26	17	49	Mean				55237				
Nod. Subst.		0	26	19	16	Differ.				06894				
Argum. of Latit.		5	29	58	33	Mean and } 11617 great Differ. }								
Reduct. add.		0	0	0	0									
True Place in the Ecliptick		6	26	17	49									
True Northern Latitude		0	0	0	8									
Former Equat. add.				7	15	Horary Motion of the Moon				29				
Latter Equat. Subst.				7	39	Horary Motion of the Sun				2				
Equat. here add.				0	24	Horary Motion of the Moon from } 27 30 the Sun								
Therefore the apparent Time														
Of the Beginning		11	42	42		1650'' : 60' :: 172:6½. whence the								
Middle		13	40	9		Difference of Time to be sub-								
End		15	37	36		tracted 6½. and the Middle of the								
						Eclipse happened 13 H. 39' 45"								
						Horizontal Parallax of the Moon				54				
						of the Sun add.				0				
						Sum				54				
						Semid. of the Sun Subst.				16				
						Semid. of the Shadow				38				
						Semid. of the Moon				14				
						Sum				53				
						27. 5 : 60 :: 53. 8 : 117½ H. 57½								
						whence the Duration is 3 H. 55'								
						the Beginning				11 H. 42' 18"				
						The End				15 H. 37' 12"				
										Mean Time				

Calculus of the Place of the Moon at the Time of the mean Syzygy in the Month of August, A. P. J. 4283.

	Mean Motion of the M.				Apog.				Nod. Retrog.			
	s	o	'	"	s	o	'	"	s	o	'	"
Year of Christ.	4	2	2	46	9	12	7	5	8	28	35	35
Before Christ	5	1	21	40	2	16	45	0	5	26	45	7
	4	13	34	5	3	3	50	15	0	26	50	15
	0	9	34	48	2	27	31	38	7	2	43	16
Sum from the Root S.	9	24	30	33	8	18	6	53				
Mean Motion.	6	7	32	12	0	24	0	12	10	24	54	13
Aug.	9	16	34	19	0	23	43	47	0	11	16	47
	0	12	4	42	0	0	6	8	0	0	2	55
	0	0	6	2	0	0	0	3	0	0	0	1
	0	0	0	19					0	11	19	43
Mean Motion	4	6	17	34	1	17	50	10	10	13	34	30
Mean Anom. of the Sun	1	28	8	26	4	4	35	47	4	4	35	47
Physical Parts add.	0	0	9	39	True Place of the Sun				True Place of the Sun			
Place M. cor.	4	6	27	13	2	16	45	37	5	21	1	17
Apog. Subst.	1	24	11	47	Argum. of the Year				Dift. of S. from Nod.			
Mean Anom.	2	12	15	26	6	21	37		0	30	8	
Equat. Subst.	0	4	48	14	Equat. add.				Equat. Subst.			
Place of the Equat in the Orbit	4	1	38	59	1	24	11	47	10	13	4	22
True Place of the Sun	4	4	35	47	True Place of Apog.				True Place of Nod.			
Distance from the Sun	11	27	3	12					5			
Variat. Subst.	0	0	3	54					Inclin. of the Lim			
True Place in the Orbit	4	1	35	5								
Nod. Subst.	10	13	4	22	Left				43619			
Argum. of Latit.	5	18	30	43	Mean Eccent.				55237			
Reduct. add.	0	0	2	51	True Eccent.				44838			
True Place in the Eclipt.	30	1	37	56	Dift.				10103			
True North Latitude	0	1	3	11	Mean and left Dift.				11617			
					4							
					True Place of the Sun.							
					4							
					True Place of the Moon in the Orbit.							
					Dift.				3			
					Horary Motion of the Moon				32			
					Horary Motion of the Sun				2			
					Horary Motion of the M. from the S.				30			
					Difference of Time added				5			

Calculus of the Place of the Moon at the Time of the true Syzygy, in the Month of *August*, A. P. J. 4283.

	Mean Motion of the M.				Apog.				Nod. Retrog.			
	s	°	'	"	s	°	'	"	s	°	'	"
Year of Christ ——— i.	4	2	2	45	9	12	7	5	8	28	35	35
Before Christ ——— 400.	5	1	21	40	2	16	45	0	5	26	45	7
20.	4	13	34	5	3	3	50	15	0	26	50	15
11.	0	9	34	48	2	27	31	38	7	2	43	26
Sum from the Root S. ———	9	24	30	33	8	18	6	53				
Mean Motion. ———	6	7	32	12	0	24	0	12	10	24	54	13
<i>August</i> . ——— Days 2.	9	29	44	54	0	23	50	28	0	11	19	58
H. 4.	0	2	11	46	0	0	1	7	0	0	0	32
Min. 11.	0	0	6	2				3				1
Mean Motion ———	4	09	34	54	1	17	51	50	10	13	33	42
Mean Anom. of the Sun ———	1	28	28	17	4	4	50	22	4	4	50	22
Physical Parts add. ———	0	0	9	41	True Place of the Sun				True Place of the Sun			
Place of M. cor. ———	4	9	44	35	2	16	58	32	5	21	16	40
Apog. subtr. ———	1	24	8	7	Argum. of the Year				Diff. of S. from Nod.			
Mean Anom. ———	2	15	36	28	6	16	17		Equat. subtr. 29	20		
Equat. subtr. ———	0	4	53	48	Equat. add.				10	13	24	22
Place of the Equat. in the Orbit	4	4	50	47	1	24	8	7	True Place of Node			
True Place of the Sun ———	4	4	50	22	True Place of Apog.				5	17	13	
Distance from the Sun ———	0	0	0	25					Inclina. of the Limit			
Variat. add ———	0	0	0	0	Mean Eccentricity ———				55237			
True Place in the Orbit ———	4	4	50	47	True ———				44790			
Node subtr. ———	10	13	4	22	Differ. ———				10447			
Argum. of Lat. ———	5	21	46	25	Mean and less Differ. ———				11617			
Reduct. subtr. ———				3								
True Place in the Eclipt. ———	4	4	52	50	Horary Motion of the Moon				32	34		
True Northern Lat. ———	0	0	42	56	Horary Motion of the Sun				2	25		
Therefore the Middle of the Eclipse of the Sun, happened at the Meridian of <i>London</i> , August 3. (because of the Biffextile Day) 4 H. 2' 53" in the Afternoon, at the apparent Time; and at <i>Athens</i> , 5 H. 47' 53".												
					Horary Mot. of the M. from the S.				30	9		
					Former Equat. subtr.				6	28		
					Latter add ———				9	24		
					Difference here subtr.				2	56		
					Reduct. subtr.				4	11		
					Mean dist. of the cent.				4 H. 2' 53"			
					Apparent Time after Noon							
					Horizontal parallax of the M.				57	15		
					Of the Sun ———				0	10		
					Semid. of the dif.				57	5		
					Semid. of the Moon ———				15	24		
					Of the Sun ———				16	2		
					Semid. of the Penumb. ———				31	26		
					Ang. of the way seen with the Sun				5	40	0	

Calculus of the Place of the Moon at the Time of the true Syzygy, in the Month of *May*, A. D. 1706.

	Mean Motion of the M.				Apog.				Nod. Retrog.			
	s	°	'	"	s	°	'	"	s	°	'	"
A. D. ——— 1701.	10	15	19	50	11	8	18	20	4	27	24	20
Years. ——— 5.	10	0	5	52	6	23	25	54				
<i>April</i> . ——— Days 30.	4	21	10	3	0	13	22	8	3	6	41	46
H. 21.	0	11	31	46	0	0	5	51	0	6	21	17
30.	0	0	16	28	0	0	0	8	0	0	2	47
									0	0	0	4
Mean Motion ———	11	18	23	59	6	15	12	21	3	13	05	54
Mean Anom. of the Sun ———	0	11	56	29	1	21	6	11	1	14	18	26
Physical Parts S, ———	0	0	8	25	True Place of the S.				1	21	6	11
Place M. cor. ———	1	18	15	34	7	05	53	50	0	06	47	45
Apog. subtr. ———	6	25	32	42	Argum. of the Year				Diff. of S. from Nod.			
Mean Anom. ———	6	22	42	52	10	20	21		23	8		
Equat. add. ———	0	2	48	22	Equat. add.				Equat. add.			
Place of the Equat. in the Orbit.	1	21	3	56	6	25	32	42	1	14	41	34
True Place of the Sun ———	1	21	6	11	True Place of Apog.				True Place of Node			
Distance from the Sun ———	11	28	7	45	Great Eccent. 66850				5	17	44	
Variat. subtr. ———				9	True ——— 58894				Inclin. of the Limit.			
True Place in the Orbit.	1	21	2	47	Mean ——— 55237							
Nod. subtr. ———	1	14	41	34	Dift. ——— 03657							
Argum. of Lat. ———	0	6	21	13	Mean and Great							
Reduct. subtr. ———	0	0	1	37	Differ. ——— 11617							
Place of the Moon in the Eclipt. ———	1	21	1	10								
True North. Latit. ———	0	0	35	9								
Horizontal parallax of the Moon ———				61	8	Horary Motion of the Moon			37	32		
Of the Sun ———				0	10	Horary Motion of the Sun			2	24		
Differ. or Semid. of the Dif. ———				60	58	Hor. Motion of the M. from the Sun			35	8		
Semid. of the Moon ———				16	38	2018" : 60' : 194" 51'						
Of the Sun ———				15	55	Prior. Aquat. add.			5	32		
Semid. of the Penumb. ———				32	33	Post. Aquat. subtr.			9	47		
Ang. of the way seen with the Sun ———				5	36	Dift. here add.			4	10		
						Whence the less Dist. of the Centr.						
						21 H. 31' 23"						
						Full Moon Eclipt. 21 H. 36' 57"						
						Therefore the Middle of the Eclipse of the						
						Sun, happened, may, 10 H. 31' 23", after						
						Nine in the Morning, at the Meridian of						
						<i>London</i> .						

Calculus of the Time of the Conjunction of the Sun and Moon, in the Month of August. A. P. J. 4283.

A. D.			s	o	'	''
			6	24	9	42
Before Christ	—	400	4	28	24	20
		20	4	13	25	13
		11	0	10	14	17
Sum. subtract.	—		9	22	3	50
Remain	—		9	2	5	52
Add to August	—		2	4	26	19
Motion of the Moon from the Sun	—		11	6	32	11
Complement	—		0	23	27	49
Days	—	1	0	12	11	27
Remain	—		0	11	16	22
Hours	—	22	0	11	10	30
Remain	—		0	0	5	52
		11	0	0	5	35
Remain	—		0	0	0	17
		34	0	0	0	17

Whence the mean Conjunction of the Sun and Moon happened A. P. J. 4283. Aug. 3. (because of the Bissextile Day) 10 h. 11½', on the Forenoon, according to the Meridian of London; but according to that of Athens 11 h. 56½. in the mean Time.

Calculus of the Time of the Winter Solstice, from Flamsteed's Tables corrected.

		s	o	'	''	s	o	'	''
December 8.	1701	9	20	43	50	3	7	40	10
		11	7	5	28	0	0	0	47
Mean Motion		8	27	49	18	3	7	40	57
Æquat. subtract.		0	0	20	15	8	27	49	18
True Place of the Sun		8	27	29	3	Mean Place of the Sun			
Complement	—	0	2	30	57	5	20	8	21
Days	—	2	0	1	58	Mean Anomaly			
Remain	—	13	0	0	32	Therefore the Sun enters Capricorn, Decemb. 11 ^o following, viz. 1 h. 15' 24" after Midnight.			
Hours	—	13	0	0	32				
Remain	—	15	0	0	0				
Remain	—	24	0	0	0				

Right Ascension of the Points of the Ecliptick of Saturn.

Degr. of the Ecliptick.	Right Ascension	Degr. of the Ecliptick.	Right Ascension	Degr. of the Ecliptick.	Right Ascension
	o /		o /		o /
1	0 52	31	27 15	61	57 7
2	1 43	32	28 10	62	58 12
3	2 35	33	29 6	63	59 17
4	3 26	34	30 2	64	60 22
5	4 18	35	30 58	65	61 27
6	5 10	36	31 55	66	62 33
7	6 1	37	32 52	67	63 39
8	6 53	38	33 49	68	64 46
9	7 44	39	34 46	69	65 53
10	8 36	40	35 43	70	67 0
11	9 28	41	36 41	71	68 7
12	10 20	42	37 39	72	69 14
13	11 12	43	38 38	73	70 22
14	12 4	44	39 37	74	71 30
15	12 56	45	40 36	75	72 38
16	13 48	46	41 36	76	73 47
17	14 41	47	42 36	77	74 56
18	15 34	48	43 36	78	76 5
19	16 27	49	44 36	79	77 14
20	17 20	50	45 37	80	78 23
21	18 13	51	46 38	81	79 32
22	19 6	52	47 40	82	80 41
23	19 59	53	48 42	83	81 50
24	20 53	54	49 44	84	83 0
25	21 47	55	50 46	85	84 10
26	22 41	56	51 49	86	85 20
27	23 35	57	52 52	87	86 30
28	24 30	58	53 55	88	87 40
29	25 25	59	54 59	89	88 50
30	26 20	60	56 3	90	90 0

Calculus of the Planet round Saturn, discover'd by Huygens.

1657. May	o	h.	'	1658. March	o	h.	'
	9	9	40 London	1	10		
Place of Saturn	12	28	57	Place of Saturn	16	25	
h from 1 * ♈	5	0	32	h from 1 * ♈	5	17	20
Æquin. subt.	10	22	00	Æquinox	10	22	00
h from the Æquin.	6	8	32	h from the Æquin.	6	25	59
Right Ascension	6	7	19	Right Ascension	6	22	40
Apog.	4	29	19	South Declinat.	13	3	
Southern Incl.	4	23					
Mean Mot. of the Satellit.				Mean Mot. of the Satellit.			
1641.	8	29	17	1641	8	29	17
16	5	29	54	17	4	20	30½
May	6	9	14	March	8	12	2½
9	6	23	13	1 Day	0	22	34½
9 h. 40'	9	5		10 H.	9	24½	
Mean Long. of Sat.	4	10	42	Mean Longit. of Sat.	11	3	49
Apocron.	10	22	00	Apocron.	10	22	00
Anom.	5	18	42	Anomal.	0	11	49
Æquat. subt.			31	Æquat. subt.	0	30	
True Long. of Sat.	4	10	11	True Longit. of Sat.	11	3	19
Apog.	4	29	19	Apog.	5	14	40
Refid.	11	10	52	Refid.	5	18	39
h. e. before the Apog.	19	8		h. e. before the Perig.	11	21	
Therefore 2½ of the Semi-diameter of the Ring Westward, and 1½ Northward.				Hence happens 1½ of the Semid. of the Ring, at the East; and 1½ at the South. or under.			

I N D E X

T O T H E S E C O N D V O L U M E.

- A**, Letter of the Alphabet, in Grammar; History thereof, 59.
— Sentiment of Julius Scaliger thereupon, *ibid.*
— How pronounced by the French and English, *ibid.*
— By the Italians and Germans, *ibid.*
Abatement, Term of Heraldry; Explication thereof, 120.
Abdal, a Kind of Dervises, in Persia; their History, 373.
Abdal Cadi, a Mahometan Philosopher and Lawyer; his History, *ibid.*
Ablative, a Case in Grammar, not particularly distinguished in the English and French from the other Cases, 70.
Abraham Blomart, Painter, of the Flemish School; his Character and particular Talent, 784.
Abraham Dypembeck, his Character, 786.
Abraham Janson, a Painter, of the Flemish School; his Character and particular Talent, 784.
Abstinent, Hereticks, why thus called, their Errors, 137.
Acceleration of heavy Bodies in the Descent; Doctrine thereof, 389.
Accident, in Logick; Definition thereof, 327.
Accidental Relation, in Metaphysick; Definition thereof, 404.
Accrescimento, Term of Musick, Signification thereof, 537.
Accusative, in Grammar, 69.
Acid Humour, in Physick; Definition thereof, 910.
Acrimonious Humour, in Physick; Definition thereof, *ibid.*
Act, in Metaphysick; Definition thereof, 403.
— Metaphysical; Definition thereof, *ibid.*
— Physical; Definition thereof, *ibid.*
Act, in Poetry, Definition and Rules thereof, 965, 966.
Action, and Re-action, in Mechanics, Theory thereof, 380.
Action, in Law; Definition thereof, 295.
— divided by Justinian into real and personal, *ibid.*
Action, in the common Law, divided into real, personal, and mixed, *ibid.*
Action, Ancestral, or Preparatory; Definition thereof, 296.
— of Accounts; Definition and History thereof, 297, 298.
— civil; Definition thereof, 295.
— of Covenant; Definition and History thereof, 301.
— of a Debt; Definition and History thereof, 296, 297.
— of a Detinue; Definition and History thereof, 298.
— of a Dower; Definition thereof, 303.
— of Ejectment; Definition and History thereof, 301.
— mixed; Definition thereof, 295.
— penal; Definition and History thereof, *ibid.*
— personal; Definition thereof, *ibid.*
— popular; Definition and History thereof, 296.
— prejudicial; Definition and History thereof, *ibid.*
— of Scandalum Magnatum, Definition and History thereof, 299, 300.
Vol. II.
- Action of Slander; Definition and History thereof, 299, 300.
— of Trespas; Definition and History thereof, 300, 301.
— upon the Case; Definition and History thereof, 296.
— upon the Statute; Definition and History thereof, 296.
— of Waste; Definition and History thereof, 304.
— of a Writ; Definition and History thereof, 303.
Action, in Painting; of Nature, of Habit, or Education; how to be expressed, 742.
Action, a Category, in Logick; Definition thereof, 323.
Actual whole, in Metaphysick, its Definition, 405.
Actual Faith, in Theology; its Definition, 1086.
— not necessary to Salvation of a Necessity of Means, 1087.
Acute, Term of Musick; Signification thereof, 537.
Adagio, Term of Musick; Signification thereof, *ibid.*
Adam Elfeimer, a Painter, of the Flemish School; his Character and particular Talent, 784.
Adam Van Ort, a Painter, of the Flemish School; his Character and particular Talent, 782.
Adjectives, in Grammar; why thus called, how placed in French and English, 67.
Adonick, a Verse in Poetry; Rules thereof, 962.
Adrian Baur, Painter, of the Flemish School; his Character and particular Talent, 785.
A Due, a Term of Musick; Signification thereof, 537.
Adverb, in Grammar, Definition thereof, how formed; to what confined; how joined sometimes, 76.
Adverbs of Time, Place, Order, Quantity, Quality, &c. *ibid.*
Adultery, how it invalidates Matrimony, 1031.
Adumbration, Term of Heraldry, Explanation thereof, 120.
Aeius, Heresiarch, his Errors, 137.
Aeneas, in Painting, how painted, 751.
Aenomaus, his Sentiment of Oracle, 365, 366.
Affinity in Sacraments, how far it dissolves Marriage, 1032.
After-Birth, in Midwifry; Extraction thereof, how performed, 455.
— what, if left in the Matrice, by breaking the Navel-string; Remarks thereupon, *ibid.*
— how to procure its Expulsion, 456.
After-Pains of lying-in Women; their Symptoms; Remarks thereupon; Cure thereof, 473.
Agat, precious Stone; Description and various Kinds thereof; very rare and curious ones, 274.
Agats Sardonyx, very valuable; their Colours, *ibid.*
Agats, Roman, Egyptian, *ibid.*
Agats, esteemed for Seals. Their Virtues, according to Pliny, Art of staining them, *ibid.*
Agility, one of the Perfections of a glorified Body, after the general Resurrection; Proofs thereof, 263.
Agnoites, Hereticks, their Errors, 154.
- Agricola*, Naturalist, his Opinion on the Nature of Glass, 1.
Aiguillon, Dutchy in France; when erected, and by whom, 616.
Air, in Pneumatics; its Nature, and Origin, according to Dr. Hook, Sir Isaac Newton, and Mr. Boyle, 944.
— its Fluidity, *ibid.*
— Weight, according to Merfenus, Galileo, Boyle, Hawksbee, and Dr. Jurin, 945, 946.
— how measured, *ibid.*
— Its Elasticity, 950, Theory thereof, 951, 952.
Air-Pump, in Pneumatics; when invented, and by whom, 950.
— Mechanism thereof, 957.
— Its Application and Phenomena, 951, 952.
Airing of Horses, in Horsemanship; Remarks thereupon, 177, 178.
Albert Aldegraf, a Painter, of the Flemish School; his Character and particular Talent, 780.
Albert Durer, a Painter, of the Flemish School; his Character, and particular Talent, 779.
— Remarks on his Works, 780.
Alberti, a Grammarian; his curious Researches in the Hebrew Language, 77.
Albigenses, their Dogma's, 158.
Albret, Dutchy, in France; when erected, and by whom, 616.
Albumen, White of an Egg; Theory thereof, 567.
Alciat, a famous Lawyer; his Sentiment on the Precedence of a Marquis, or Count, in Nobility, 618.
Alcoran, Book of the Law of Mahomet; History thereof; its Division and Subdivision; principal Editions; Commentaries thereupon, 372.
Alençon, Dutchy in France; when erected, and by whom, 616.
Alerions, Pieces in Heraldry; blazon thereof, 120.
Alexander Aphroditæus, the first Author that makes Mention of Glass, 6.
Alexander the Great, in Painting; how painted, 751.
Alexander, John, the Pope's Nuncio at the Diet of Worms, assembled on the Affair of Lutheranism; his Harangue to the Assembly, 349.
Allantoides, Chimerical Membrane of the Fœtus, 451.
Allegory, Figure of Rhetorick; Definition and Examples thereof, 1014.
Allegretto, Term of Musick; Signification thereof, 537.
Allegro, Term of Musick; Signification thereof, 537.
All-Souls, College, in Oxford, when founded, 1131.
Almarick, Dr. of Paris, his Errors, 158.
Alms, in Theology, Precept thereof, 1094.
— of what Goods given; and to whom, 1095.
Aloes-Tree, in Natural History, where found, its Size, Figure, Texture, Virtues, Value, Fables thereupon, 560.
Aloph de Vignacourt, Grand-Master of Malta, 683.
Alphabets, in Grammar, English, French, Latin, Hebrew, Greek; their several Characters, and Number thereof, 55.

- Alphabets, Chaldee, Syriack, Samaritan, Arabick, Persian, Turkish, Georgian, Cophitic, Muscovite, Sclavonian, Dutch, Spanish, Italian, of Bengal, of the Brama's, Ethiopick, Tartarian; Number of their respective Letters, 55.
- Alphabets, when framed and alter'd, their Irregularities, according to Dr. Wilkins, *ibid.*
- Altering Apozem, in Pharmacy; how composed, 813.
- Alternative Remedies, in Pharmacy, what, 807.
- Altitude, in Navigation; how observed with the Fore-Staff, 598.
- Altitude of the Pole, at Sea; how taken, by Means of a Watch, according to M. Parent's Method; Remarks thereupon, 599.
- Alvin*, Dutchy, in France; when erected, and by whom, 616.
- Amber, yellow, Succinum or Karabe; Definition thereof; its Origin, Sentiment of the antient and modern Naturalists thereupon; its most remarkable Property; Sentiment of the Peripateticians, and of *Gassendus* thereupon, 425. Of Des Cartes, of De Coetlogon, 490.
- Ambrogio Lorenzetti*, a Painter, of the Roman School; his Character, and particular Talent, 759.
- Americ d'Amboise*, Grand-Master of Malta, 683.
- Amethyst, precious Stone, its Colour, where dug, different Sorts thereof, their Value, 273.
- Amethyst, Hieroglyphick, Explanation thereof, 167.
- Ammian Marcellin*, his Sentiment on the Quality and Rank of a Squire, 623.
- Annios, one of the Membranes which envelopes the Child in the Womb; Description thereof, 451.
- Amontons*, M. his Sentiment on the Causes of an Earthquake, 434.
- Amphibrachius, the Foot of a Verse in Poetry, 961.
- Amplification, in Rhetorick; Definition and Examples thereof, 1016.
- Amplification of Things and Words, 1017.
- Amplitude, in Navigation; Definition thereof, Eastern, Western, Northern, Southern, Magnetical, 592.
- Anagogick Sense of the Scripture, in Theology; Definition thereof, 1085.
- Anapest, the Foot of a Verse in Poetry, 961.
- Anasarca, a Kind of Dropsy, in Physick; Causes, Symptoms, and Cure thereof, 932.
- Anchor, Hieroglyphick; Explication thereof, 168.
- Anchored, Term of Heraldry; Explanation thereof, 120.
- Andate, Term of Musick; Signification thereof, 538.
- Andrew Carlstadt*, Luther's Disciple; his History and Dogma's, 339, 350.
- Andrew Mantegna*, Painter, of the Roman School; his History, Character, particular Talent, and best Pieces; Remarks thereupon, 761.
- Andrew Orgogna*, Painter, of the Roman School; his Character and particular Talent, 759, 760.
- Andrew Osander*, a Confessionist; his Dogma's, 158.
- Andrew Tutti*, of Florence; a Painter, of the Roman School; his Character, and particular Talent, 759.
- Andrew Verrocchio*, a Painter, of the Roman School; his Character and particular Talent, 760.
- Andrea Boccelli*, a Painter, of the Roman School; his Foresight of the clair-obscur 741.
- Areometer, in Pneumatics; Mechanism thereof, 958.
- Application of that Mechanism, 959.
- invented by Wolfius and d'Olembay, 959.
- Ant de Clermont*, Grand Master of Malta, 683.
- Angels, in Heraldry, how blazon'd, 113.
- Angle, in Surveying; how taken with a Semicircle, 1076.
- with the plain Table, consider'd as a Theodolite, 1077.
- consider'd as a Circumferentor, *ibid.*
- Angoulm*, Dutchy, in France; when erected, and by whom, 616.
- Animals, in Painting; how characterized, 741.
- Animals, in Heraldry; how blazon'd, 113.
- Anime, Term of Heraldry; Signification thereof, 120.
- Annib. Caracci*, a Painter, of the School of Lombardy; his Character and particular Talent, 755. Remarks on his Works, 776.
- Annual Leaves, in Natural History, 569.
- Annulet, in Heraldry, what, 115.
- Anonymous Society, Definition thereof, 1065.
- Antecedent, in Logick; Definition thereof, 333.
- Antibacchius, Foot of a Verse, in Poetry, 961.
- Anthem, in Musick; Signification thereof, 538.
- Antropomorphites*, Hereticks; their Errors, 158.
- Antiepileptick Elixir, in Pharmacy; its Virtues, 865.
- Antimony, in Minerals, Definition thereof, Explanation of the Definition; where found, how found, its first Preparation and Uses; Sentiment of the Chymists thereupon, 493.
- Antinephretick Potion, in Pharmacy; Preparation, Virtues, and Doses thereof, 815.
- Antique, in Painting; how to be imitated, 742.
- Antique Painting of a Wedding in the Aldobrandine Vineyard at Rome; Description and Taste thereof, 757.
- Antithesis, in Rhetorick; Definition and Examples thereof, 1012.
- Antonomasy, Figure, in Rhetorick; Definition and Examples thereof, 1014.
- Antony Flavian*, Grand-Master of Malta, 683.
- Antony of Messina*, a Painter of the Roman School, the first Italian who painted in Oil; his Character and particular Talent, 760.
- Antony Corregio*, a Painter, of the School of Lombardy; his Character and particular Talent, 774.
- Remarks on his Works, 775.
- Antony Vandyke*, a Painter, of the Flemish School; his Character, and particular Talent, 784.
- Remarks on his Works, 785.
- Apelles*, Marcion's Disciple, and Heresiarch; his Errors, 134.
- Apelles*, Painter; his Strength of Genius, Correctness, grand Taste; his Means to know the Publick's Opinion; painted often Alexander the Great, 758.
- Aperitive, Emulsion, in Pharmacy; Preparation, Virtues, and Doses thereof, 814.
- Aperitive Tizane, in Pharmacy; Preparation, Virtues, and Doses thereof, 812.
- Apharefis, Figure, in Grammar; Definition thereof, 76.
- Aphs, Ulcers, or Cankers of the Mouth of new-born Children; Causes, Symptoms, and Cure thereof, 484.
- Apobaterion, in Poetry; what, 962.
- Apocope, Figure, in Grammar, Definition thereof, 76.
- Apogiatum, Term of Musick; Signification thereof, 538.
- Apollinaris*, Heresiarch, 138.
- Apollinarists*, Hereticks; their Errors, *ibid.*
- Apollo*, in Painting; how painted, 757.
- Apoplexy, Causes, Symptoms, and Cure thereof, 917.
- Apostrophe, in Grammar; Definition thereof, 76.
- Apostrophe, Figure, in Rhetorick; Definition and Examples thereof, 1013.
- Apotheosis, in Mythology, what, 550. that of Jesus Christ, proposed by Tiberius; that of Claudius ridiculed by Seneca; Ceremonies thereof, as related by Herodian, *ibid.*
- Apotheosis, called also Consecration, how represented on Medals, *ibid.*
- Apotane, Term of Musick; Signification thereof, 538.
- Apozem, in Pharmacy; Definition and Preparation thereof, 76.
- Apparent Magnitude, in Opticks; Definition thereof, 634.
- Apparent Magnitudes of the Sun and Moon, in Opticks, *ibid.*
- Theory thereof, according to *Albazzen*, *Pitellio*, *Kepler*, *Peckam*, *Roger Bacon*, *Wallis*, *Des Cartes*, *Father Gage*, *Gassendus*, &c. 638.
- Appearance, in the Common Pleas, History thereof, 310.
- Application of the Weight, or Power, to the Lever, in Mechanicks, 375.
- April*, Month, in Painting; how painted, 752.
- Aqua absinthii Pontici*; Preparation, Virtues, and Doses thereof, 863.
- Aqua ad Gonorrhoeam virulentam*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua ad Gutturis affectus*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua Anticolic*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua Antibetica*; Preparation, Virtues, and Doses thereof, 861, 862.
- Aqua Antihydrica*; Preparation, Virtues, and Doses thereof, 863.
- Aqua Antiscorbutica*, in Pharmacy; Preparation, Virtues, and Doses thereof, 862.
- Aqua Apoplectica*; Preparation, Virtues, and Doses thereof, 861.
- Aqua Aphmatica*; Preparation, Virtues, and Doses thereof, 863.
- Aqua caponis quercetani*; Preparation, Virtues, and Doses thereof, 861.
- Aqua Carminativa*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua Castorei*; Preparation and Virtues thereof, 862.
- Aqua Cephalica Caroli quinti*; Preparation and Virtues, and Doses thereof, *ibid.*
- Aqua contra Vermes*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua contra ardorem Urinae*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aqua divina*; Preparation, Virtues, and Doses thereof, 862.
- Aqua epileptica*; Preparation, Virtues, and Doses thereof, 864.
- Aqua hysterica fabrici*; Preparation, Virtues, and Doses thereof, 861.
- Aqua imperialis*; Preparation, Virtues, and Doses thereof, 860.
- Aqua lactis Alexiteria*; Preparation, Virtues, and Doses thereof, 864.
- Aqua Lavendulae composita*; Preparation, Virtues and Doses thereof, 865.
- Aqua limacum magistralis*; Virtues thereof, 864.
- Aqua mirabilis*; Preparation, Virtues, and Doses thereof, 861.
- Aqua nephretica*; Preparation, Virtues, and Doses thereof, 863.
- Aqua oculoris interna*; Preparation and Virtues thereof, 864.
- Aqua Paralytica*; Preparation, Virtues, and Doses thereof, 861.
- Aqua Pectoralis*; Preparation, Virtues, and Doses thereof, 862.
- Aqua Theriacalis*; Preparation, Virtues, and Doses thereof, 860.
- Aqua viridis correcta*; Preparation and Virtues thereof, 864.
- Aqua vitæ mulierum*; Preparation, Virtues, and Doses thereof, *ibid.*
- Aquilian Law*; by whom instituted; Chiefs thereof, 295.
- Aquilus*, Mythologist; his Sentiment of the domestick Laws, 548.
- Arabic Language, in Grammar; Copiousness thereof, 77.
- Archimedes*, his Sentiment on the Burthen of a Ship, 594.
- Architrave over the Tillar Transom, in Naval Architecture; Dimensions thereof, 578.
- Archonticks*, Hereticks; their Errors, 135.
- Arch-Pump, in Naval Architecture; Dimensions thereof, 577.
- Ardent, or burning Fevers, in Physick; Causes, Prognostick, and Cure thereof, 927.
- Arctin*, Guide; his System of Musick; Explication thereof; Remarks thereupon, 512.
- Argent, a Metal, in Heraldry; how blazon'd, 108.
- Argument, in Rhetorick; Division thereof into artificial or intrinsic, and inartificial, or extrinsic, 1007.
- Argument, by Etymology, in Logick; Definition thereof, 333.
- Argumentation, in Logick; its Definition, 333. seven Species thereof, 334.
- Aristocracy, Form of Government; History thereof, 51.
- Aristoxenus*, his Sentiment on the Motion of the Voice in Musick, 530.
- Arius*, Heresiarch, 137.
- Armed, Term of Heraldry; Signification thereof, 120.
- Armenian Bole, in Minerals; its Virtues, 500.
- Armenian Stone; Definition thereof, its Colour, where found, Sentiment of Boerhaave thereupon; its Uses, 495.
- Arminians*, a Sect, their Dogma's, 159.
- Arminius*, Heresiarch; his Errors, *ibid.*
- Arms, in Heraldry, 127.
- of the King of France; how blazoned, *ibid.*
- of the King of England; how blazoned, *ibid.*
- of the King of Spain; how blazoned, *ibid.*
- of the King of Denmark; how blazoned, *ibid.*
- of the King of Sweden; how blazoned, 127, 128.
- of the King of Poland; how blazoned, 128.
- of the King of Prussia; how blazoned, *ibid.*
- of the Queen of Hungary; how blazoned, 127.
- Arms

- Arms of the Duke of Savoy; how blazoned, 128. why he quarters with the Arms of Jerusalem, *ibid.*
- of the Grand Duke of Tuscany; how blazoned, *ibid.*
- of the Duke of Mantua; how blazoned, *ibid.*
- of the Duke of Modena; how blazoned, *ibid.*
- of the Duke of Parma and Placentia; how blazoned, *ibid.*
- of the Elector and Archbishop of Mentz; how blazon'd; Origin of the Wheel in that Escutcheon, *ibid.*
- of the Elector and Archbishop of Cologne; how blazoned, *ibid.*
- of the Elector of Bavaria, how blazoned; Remarks thereupon, *ibid.*
- of the Elector of Brandenburg; how blazoned, *ibid.*
- of the Elector of Saxony; how blazoned, *ibid.*
- of the Elector Palatine; how blazoned, *ibid.*
- of the Empress of Russia; how blazoned, Remarks thereupon, *ibid.*
- of the Emperor of the Turks; how blazoned, *ibid.*
- of the Republick of Venice; how blazoned, *ibid.*
- of the Republick of Genoa; how blazoned, *ibid.*
- of the Republick of Ragusa; how blazoned, *ibid.*
- of the Republick of Holland; how blazoned, 128.
- of the Republick of Geneva; how blazoned, *ibid.*
- of the Canton of Zurich; how blazoned, *ibid.*
- of the Canton of Bern; how blazoned, *ibid.*
- of the Canton of Lucern; how blazoned, 123, 129.
- of the Canton of Zuri; how blazoned, *ibid.*
- of the Canton of Switz; how blazoned, *ibid.*
- of the Canton of Underval; how blazoned, *ibid.*
- of the Canton of Zug; how blazoned, *ibid.*
- of the Canton of Glaris; how blazoned, *ibid.*
- of the Canton of Basil; how blazoned, *ibid.*
- of the Canton of Fribourg; how blazoned, *ibid.*
- of the Canton of Soleure; how blazoned, 129.
- of the Canton of Appenzel; how blazoned, *ibid.*
- of the great Cham of Tartary; how blazoned, *ibid.*
- of the Emperor of China; how blazoned, *ibid.*
- of the Great Mogul; how blazoned, *ibid.*
- of the Sophy of Persia; how blazoned, 129.
- of the Emperor of Japan; how blazoned, *ibid.*
- of the Emperor of Fez and Morocco; how blazoned, *ibid.*
- of the Emperor of Ethiopia; how blazoned, *ibid.*
- Arms; Remarks upon those of the Sovereigns of Asia and Africa, 129.
- Arms, their Origin; according to Favin, Segoin, Chorier, Camden, Spelman, and others.
- of Arms in France, and England; of hereditary Arms in England, according to Camden, *ibid.*
- Arms used for Hieroglyphicks, by the Greeks and Lacedemonians, 167.
- Arnould de Troye; Grand Master of the Knights Templar; his History, 688.
- Arrache, Term of Heraldry; Signification thereof, 120.
- Artis, Term of Musick; Signification thereof, 533.
- Artemon, Hierarch; his Errors, 135.
- Artificial Taste, in Painting; what, 795.
- Ascension of Christ into Heaven; how effected, by what Virtue, Convenience thereof, 260, 261.
- Attes, in Glass-making; what, 2.
- Asiatick Style, in Rhetorick; Definition thereof, 1011.
- Asphaltum, or Asphaltos, in Minerals; Definition thereof, where found, its Use among the Arabs; its Virtues, 496.
- Aspirate, in Grammar; History thereof, 58.
- Aspiration, in Grammar; Sign thereof among the Greeks, *ibid.*
- Asis, Hieroglyphick; Explanation thereof, 163.
- Assart, in Hunting; what, 190.
- Assize, Writ, in Law; Definition and History thereof; Littleton's Opinion thereupon, 301.
- Assize of Novel Disseisin; Definition and History thereof, 301, 302.
- Assize of Mort d'Ancestor; Definition and History thereof, 302.
- Assize of Darcin Presentment; Definition and History thereof, *ibid.*
- Assodes, a burning Fever; in Physick, 927.
- Assaying, in Refining, Gold; Method thereof, 999.
- Silver; Method thereof, 1000.
- Tin; Method thereof, *ibid.*
- Lead; Method thereof, *ibid.*
- Afterism, in Grammar; Signification thereof, 76.
- Asthma, a Disease, in Physick; Division thereof, its Causes, Symptoms, Prognostick, Cure, 922.
- Astrea, in Painting; how painted, 752.
- Astringent Remedies, in Pharmacy; in how many different Manners they operate, 808.
- Astringent Emulsion, in Pharmacy; Preparation, and Virtues thereof, 814.
- Astringent Potion, in Pharmacy; Preparation and Virtues thereof, *ibid.*
- Astringent solid Errhina; Preparation, Virtues, and Doses thereof, 816.
- Astringent Tizane; Preparation and Virtues thereof, 812.
- Astronomical Telescope, in Opticks; Definition, Construction, and Theory thereof, 650.
- how shortened, 651.
- Huygen's Observations thereupon, 651, 652.
- Astronomy, in Painting; how painted, 752.
- Attitude, in Painting, Definition and Rules thereof, 741.
- Atto, Term of Musick; Signification thereof, 538.
- Attorney, in common Law; their Admission, Duties, Office, 308, 309.
- Attorney General; his Office, 309.
- Attractive Faculty of the Magnet, Theory thereof; Sentiment of Gassendi, Merfenus, Whiston, Huygens, Des Cartes, De Coetlogon's thereupon, 369.
- Auditors of the Exchequer, in Law; their Office, 307.
- Auditors of the Press, or Impress; their Office, *ibid.*
- Auditors of the Receipts; their Office, *ibid.*
- Avelane, Term of Heraldry; Signification thereof, 120.
- August, Month, in Painting; how painted, 752.
- Augustin Caracci, a Painter, of the School of Lombardy; his Character, and particular Talent, 775. Remarks on his Works, 776.
- Aumont, Dutchy, in France; when, and by whom erected, 617.
- Aura Scrotina, an aqueous Meteor, in Meteorology; Definition and Theory thereof, 423.
- Aurora, in Painting; how painted, 752.
- Auster, South Wind; how painted, 753.
- Auvergne, Dutchy, in France; when, and by whom erected, 615.
- Auxiliary Verbs, in Grammar; how distinguished by the Abbot Dangeau, 71.
- Axian, in Metaphysick; Definition and Rules thereof, 407.
- Axioms, in Logick; Rules thereof, 344, 345.
- Axis in Peritochio, in Mechanicks; Definition thereof, takes Place in the Motion of every Machine, is to be referred to the Lever of the first Kind, 377.
- Azimuth Compass, in Navigation; Description and Use thereof, 592.
- Azimuth of the Sun, in Navigation; Definition and Theory thereof, *ibid.*
- Azure, a Colour, in Heraldry; blazon thereof, why preferred by the French to all the other Colours, 108.
- B.
- B**, Letter of the Alphabet, in Grammar; Definition, History, and Pronunciation thereof, 59.
- Bacchus, Foot of a Verse, in Poetry, 661.
- Bachelor of Arts, in the University of Oxford; Time required for their Admission, 1192.
- of Divinity; Time required for their Admission, *ibid.*
- of Medicine; Time required for their Admission, *ibid.*
- Bachelors in the University of Cambridge; their Admission, 1194.
- Back, Hieroglyphick; Explication thereof, 161.
- Backbone, Hieroglyphick; Explication thereof, *ibid.*
- Badger, in Hunting; its different Names according to the Difference of its Age; two Sorts thereof mentioned by M. Tuberville, 195. Its Qualities, and how to be hunted, 196.
- Baglivi, his Remedy for the Cholick, 935.
- Bagpipe, Instrument of Musick of the Wind-Kind; Description thereof, how used, 535.
- Bajans, or Greek Clafs, in the University of Edinburgh; how govern'd, 1199.
- Bail, in Law; Definition thereof; why so called, Difference between Bail, and Mainprife, by Manwood, 310.
- Bail, common; Definition thereof, *ibid.*
- Bail, special; Definition thereof, *ibid.*
- Bail-piece, two Sorts thereof; how written, *ibid.*
- Bail above, and Bail below; what,
- Bail, how put, and taken, in the common Pleas, 317.
- Balaf Ruby, in Lapidary; Colours thereof, 272.
- Baliol College, in the University of Oxford; when founded, and by whom, 1191.
- Ball and Socket, an Instrument contrived to give to another full Motion every Way, in Surveying; Description thereof, 1076.
- Ballance, or Balance, in Mechanicks, Definition and Description thereof, 375.
- Ballance, antient, or Roman, modern; Mechanism of both, *ibid.*
- Ballance, various Application thereof, 375, 376.
- deceitful; where the Fraud consists, 376.
- Ballast of a Ship, in Navigation, how to be order'd, 595.
- Balsam, in Pharmacy; Definition and Division thereof into natural and artificial, 871.
- Balsam to make Children cut their Teeth easy; Preparation thereof, 873.
- Balsam of Arcæus; Preparation and Virtues thereof, 872.
- Balsamum Apoplecticum reformatum*, or the apoplectick Balsam; Preparation and Virtues thereof, 871.
- Balsamum Angelicæ reformatum*, or Balsam of Angelico, reformed; Preparation and Virtues thereof, 872.
- Balsamum Polycræstum*, or Polychrest Balsam; Preparation and Virtues thereof, 871.
- Balsamum Solimani*; or Soliman's Balsam; Preparation and Virtues thereof, 872.
- Balsamum Guidonis*; or Guido's Balsam; Preparation and Virtues thereof, 873.
- Balsamum Bezoardium*, or Balsam of Bezoard; Preparation and Virtues thereof, 872.
- Balsamum vulgare*, or vulgar Balsam; Preparation and Virtues thereof, *ibid.*
- Balsamum Paralyticum*, or Balsam for the Palsy; Preparation and Virtues thereof, 873.
- Balsamum Uterinum*, or Balsam for the Maladies of the Womb; Preparation and Virtues thereof, *ibid.*
- Balsamum Stypticum*, or Styptick Balsam; Preparation and Virtues thereof, 874.
- Balsamum Lucatelli*, or Lucatellus's Balsam; Preparation and Virtues thereof, *ibid.*
- Balsamum Tranquillum*, or the tranquil Balsam of the Abbot Rousseau; Preparation and excellent Virtues thereof, *ibid.* Remarks thereupon, 875.
- Balsamum Antipodagrium*, or Balsam to ease Pains of the Gout; Preparation thereof, 875.
- Balsamum Nephriticum*, or Balsam for the Nephritic; Preparation thereof, *ibid.*
- Balsamum ad Nervorum Puncturas*, or Balsam for the Punctures of the Nerves; Preparation thereof, 874.
- Balsamum mirabile Fulleri*, or marvellous Balsam of Fuller; Preparation and Virtues thereof, 876.
- Balsamum sulphuris*, or Balsam of Sulphur; Preparation and Virtues thereof, 874. Simple, or with Oil of Aniseed, *ibid.*
- Balsamum Christi, Paracelsi, reformatum*, or reformed Balsam of Christ, of Paracelsus; Preparation, and Virtues thereof, 873.
- Balsamum album*, or white Balsam; Preparation, and Virtues thereof, 873.
- Baltazard Keler, his Method for the Proportions to be given to Pieces of Ordnance, 101.
- Baltazard Pacimontanus, and Bernard Rotbeman, instituted the Sect of the Anabaptists, 158.
- Bandelet, in Heraldry; Signification, and Disposition thereof, 112.
- Banneret,

- Banneret, Knight, in Nobility; what, according to Spelman; their History, and Qualifications, 622. Their Power, according to Froissart; and Form of Creation, 623.
- Baptism of Christ, in Incarnation, Convenience thereof, according to all its Circumstances, 253.
- Bartholæus Porta*, wrote on Magick, 363.
- Bartholæus Ursini*, Grand Master of the Order of Malta, 683.
- Bar, in Musick; Definition and Use thereof, 538.
- Bar, an honourable Ordinary, in Heraldry; Disposition thereof, 120.
- Bar Gemel, in Heraldry; Signification thereof, 120.
- Barb, a Horse, in Horsemanship; its Qualities, and Value: Mountain-barb preferable to others, why, 172.
- Barbed, or Crested, Term of Heraldry; Signification thereof, 120.
- Barbiton, an Instrument of Musick, used by the Romans, 531.
- Barilla, Salt thereof, used in Glass-making, 4.
- Bar-le-Duc*, Dutchy in France; when, and by whom erected, 615.
- Barometer, in Pneumatics; Structure thereof, 946, 947.
- Barometers, their Phenomena, Uses, and Theory; Drs. Beal, and Halley, and Leibnitz's Remarks thereupon, 948, 949.
- Barometers, Wheel, Pendant; Structure, and Convenience thereof, 947.
- Baron, in Nobility, Definition thereof; Origin of the Term, 620.
- Baron's Helmet, in Heraldry; how disposed, how surmounted, 115.
- Barons, in England; their Rank, and Prerogatives, 620.
- Barons by antient Tenure, what; divided, after the Conquest, into Majores, and Minores, *ibid.*
- Baronet, Knight, their Dignity, Privileges, Place, 623.
- Baronies; History thereof, from their first Creation till now, 620.
- Baronies belonging to Bishops in England; how called by some, *ibid.*
- Baronies, what, according to Bracton, 620, 621.
- Baroscope, or statical Barometer; Mechanism, and Uses thereof, 947.
- Barrel, of a common Musket, in Gunnery; Structure, and Proportions thereof, 115.
- of a Carbine; Structure, and Proportions thereof, *ibid.*
- of a Musquetoon; Structure, and Proportions thereof, *ibid.*
- of a Pistol; Structure, and Proportions thereof, *ibid.*
- Barrelet, or Barrulet, in Heraldry; Signification, and Description thereof, 120.
- Barruly, Term of Heraldry; Signification thereof, *ibid.*
- Barry, Term of Heraldry; Signification thereof, *ibid.*
- Barry-pily, Term of Heraldry; Signification thereof, *ibid.*
- Bartholdus Schwartz*, Inventor of Gunpowder, 105.
- Base, a Cannon, in Geometry, its Weight, and that of its Ball; its Length, as it obtains here in England, 84.
- Basilick, antient Cannon; its Caliber, Weight, and Length, 84.
- Basilisk, Hieroglyphick, Explication thereof; seen on some Obelisks, 164.
- Bassoon, Instrument of Musick; Description thereof, 535.
- Bastard Galley, in Naval Architecture, 584.
- Bas, Hieroglyphick; Signification thereof, 166.
- Batchelor, Knight, their History, 622. Both Batchelor, and Banneret, extinguished in France, 623.
- Batteries, to beat in Breach, how raised, 100.
- Batteries, either for Cannon or Mortars, how raised, 99.
- Battering Ram, Instrument of War among the Antients; Description thereof by Josephus, and Felleben; how managed, 105.
- Battoon, Term of Heraldry; Signification thereof, 120.
- Battoon, and Semi-battoon, their Value, in Musick, 523.
- Baudela*, Mythologist; his Sentiment on the Rite of the Panthea among the Romans, 549.
- Beadle, in the University of Oxford; Squire, Yeoman; their Office, 1190.
- Beagle, a Kind of Dog, in Hunting; its Qualities, where most used, 128. What, when they bark, and cry, 189.
- Bear, in Hunting; its Nature, and Qualities; how to be hunted, and where hunted, 199.
- Beatifick Vision, in God and his Attributes; Possibility thereof, how demonstrated. Its Existence, how proved; never enjoyed by any Man living, such as it is, not even by Moses, and St. Paul, 23. Principles concurring towards it, *ibid.*
- Beatifick Vision; a certain, evident, and perfectly scientific Knowledge, 26.
- Beams of the first Deck, in Naval Architecture; Dimensions thereof, 577. Of the second Deck, Dimensions thereof, *ibid.* Of the upper Deck; Dimensions thereof, *ibid.*
- Beavers, in Hunting; their Nature, Qualities; how, and where hunted, 199.
- Beaufort*, Dutchy, in France; when, and by whom erected, 617.
- Beaumont le Sennonois*, Dutchy in France; when, and by whom erected, 616.
- Becke, Term of Heraldry; Signification thereof, 120.
- Bee, Hieroglyphick; Signification thereof, 166.
- Belfroy, in Heraldry; how known, 114.
- Bejards*, and *Bejinet*, Hereticks; their Errors, 158.
- Bend, honourable, ordinary in Heraldry, 111.
- Bend, in Heraldry; Divisions thereof, 112.
- Benedictine* Monks, in Orders; their History, 666.
- Benedictine* Nuns, in Orders; their History, 675.
- Benengarius*, Chief of the Sacramentarians, his History, and Dogma's, 157, 158.
- Bernard de Tremulay*, Grand Master of the Knights Templars, 688.
- Bernardine* Monks, in Orders; their History, 667.
- Bernardine* Nuns, in Orders; their History, 675.
- Bernard's Inn*, in London; when, and by whom founded, and to what Purpose, 1195.
- Berry*, Dutchy, in France; when, and by whom erected, 615.
- Bertrand de Blancfort*, Grand Master of the Knights Templar; his History, 688.
- Bertrand de Campz*, Grand Master of the Order of Malta, 682.
- Bertrand de Foix*, Grand Master of the Order of Malta, *ibid.*
- Bertrand*, M. Archbishop of Narbonne, founded a College of the same Name at Paris; History thereof, 1189.
- Beryl, in Lapidary, Colour thereof; whence brought; its Difference from the Chrysoberyl, 273.
- Beryl of the Antients, what; Sentiment of some Authors thereupon, 273, 274.
- Beryl, how found, 274.
- Bilious Colic, in Physick; Causes, Symptoms, Prognostic, and Cure thereof, 934, 935.
- Bill in Chancery, in Law; Definition thereof; to whom addressed, how answered, 305.
- Billets, Pieces of Heraldry; Signification thereof, in England, according to Mackenzie, 121.
- Billetty, Term of Heraldry; Signification thereof, 121.
- Bismuth, in Minerals; Nature thereof, 493.
- Bismuth, artificial; Preparation thereof, 494.
- Bisyllable Words, in Grammar; History thereof, 66.
- Bitter Apozem, in Pharmacy; Preparation thereof, 813.
- Bitumens, soft, in Minerals; Nature thereof, 496.
- Blacksmith, his Shop, how fitted; Description of his Forge, 1063.
- Bleach, to, coarse Linnen; Method thereof, 1207.
- Blemish, in Hunting; Signification thereof, 189.
- Block, great of the Drift, in Naval Architecture; Proportions thereof, 581.
- Blondel*, M. an excellent Engineer, 91.
- Bloody Rain, in Meteorology; History thereof, 424. Whence it can proceed, according to Dr. Merret, and Pierese, *ibid.*
- Blowing Iron, in Glass-making; Description, and Use thereof, 3.
- Blowing Round Glasses, in Glass-making; Operation thereof, *ibid.*
- Window, or Table-glasses; Operation thereof, 4.
- Looking Glasses; Operation thereof, 4, 5. First communicated to the English by the French, 5, 6.
- Blown Bladders, a great Help in Swimming, 1082.
- Boar, wild, in Hunting; its different Names according to the Difference of its Age, 188. its Nature, Qualities, how to be hunted, 197, 198.
- Boats in Gunnery, their Utility in Sieges, 98.
- Bocca, or Working-Hole, in a Glass-House, Description and Use thereof, 3.
- Bochart*, Mythologist, his Sentiment on the Origin of the Name of *Silennus*, in Mythology, 552.
- Boileau*, in Poetry, his Rules for the Tragedy, 969.
- for the Satyr, 972.
- for the Idyls, 975.
- Boil'd Silks, in Weaving, Method thereof, 1205.
- Bollito, in Glass making, a Kind of Composition to make white Glass with; Preparation thereof, 3.
- Bolster of the Helm, in Naval Architecture, Situation and Dimension thereof, 578.
- Bolus, in Pharmacy, Preparation thereof, 815.
- Bomb, in Gunnery, how charged, 90.
- Bombardiers, in Gunnery, 91.
- Bonamico, Bufamacco*, a Painter of the Roman School, his History, Character, and particular Talent, 759.
- Binnet*, William, founded a College of the same Name in the University of Paris, 1189.
- Bononian Stone, in Opticks, its Nature, where found, its Figure and Calcination into a Phosphorus, 639, 640.
- Phosphorus prepared of it, its Effects, 662.
- Borders, in Printing, Description thereof, 985.
- Bordure, in Heraldry, Definition thereof, 109.
- Simple and Compound, *ibid.*
- Bore of a Concave Mortar, Dimensions thereof, 87.
- Borri*, his Remedies for the Dysentery, 934.
- Bosfu*, in Poetry, his Division of the Catastrophe of a dramatick Poem, 965.
- his Character of a Hero, in Tragedy, 969.
- Boutefeu, in Gunnery, Definition thereof, 87.
- Bow-line of the Fore-top Mast, in Naval Architecture, length thereof, *ibid.*
- Bow-line of the Main-Mast, length thereof, *ib.*
- Boxhornius*, his Sentiment on the Invention of Printing, 990.
- Brass, called Rosetta, in Gunnery, Mines thereof, where found, 101.
- Brazen-Nose* College, in the University of Oxford, when and by whom founded, 1191.
- Bread of Munition for 32000 Foot and 18000 Horse, &c. in Gunnery, 97.
- Breeding of grey Hounds, in Hunting, Method thereof, 187, 188.
- Brevity, a Thing requisite in an Exordium, in Rhetorick, Rules thereof, 1009.
- Brienne*, Dutchy, in France, when and by whom erected, 616.
- Brigade of Artillery, how composed, their Duties, 95.
- Brigade of the Park of Artillery, their Duties, *ibid.*
- Brilliant Diamond, how formed, 217.
- Brisé, Term of Heraldry, Signification thereof, 121.
- Brissac*, Dutchy, in France, when, and by whom erected, 617.
- Brisure, Term of Heraldry, Signification thereof, 121.
- British*, or Welch Language, History thereof, 80.
- Brown Sugar, in Sugar-Refining, Preparation thereof, 1075.
- Brunsvick, Herald, in England, when and by whom instituted, 131.
- Buck, in Hunting, its different Names according to the Difference of its Age, how to be hunted, 193.
- Bullet, in Gunnery, Definition, and different Sorts thereof, 85.
- hollow, branched, two-headed, Chain, Definition thereof, 86.
- their Weight according to their Caliber, 86, 87.
- Bullets, red, when fired, 86.
- Bunt-lines, in Naval Architecture, length thereof, 574.
- Burchard of Shunden, Grand-Master of the Teutonic Order, 691.
- Burdens of the Deck, in Naval Architecture, Dimensions thereof, 580.
- Burgefs*, M. one of the most famous Masters of the Spinnet in England, 533.
- Burial of Christ, in Incarnation; Truth, and Convenience thereof, 257, 258.
- Bursars, in Marshal College, at Aberdeen in Scotland; by whom founded, 1199.
- Butler*, Earl of Arran, Chancellor of the University of Oxford, 1191.
- Buttock of a Ship, in Naval Architecture; Construction thereof, 571.

C.

C, Letter of the Alphabet, in Grammar; Definition, History, and Pronunciation thereof, 59.

INDEX to the SECOND VOLUME.

- C, in Musick, Signification thereof, 538.
- Cabbala, a mysterious Science among the Jews; Definition thereof, its Origin, four Kinds of Cabbala, 268, 269.
- Cable, in Naval Architecture, Dimensions thereof, 575.
- Cabosse, Term of Heraldry, Signification thereof, 121.
- Cadence, in Musick, Definition thereof, 538.
- Cadence, in Musick, two Sorts of it, distinguished by M. Bourlcau, *ibid.*
- Cadence, perfect, imperfect, broken, with a Rest, without a Rest, *ibid.*
- Cadences, simple and double, several Sorts of the last Kind, *ibid.*
- Caducee, Hieroglyphick, Explication thereof, 164.
- Calcar, a Furnace used in Glass-making, Description thereof, 2.
- Caliber Rule, in Gunnery, Description and Use thereof, 86.
- Call, in Hunting, a Lesson blown on the Horn to comfort the Hounds, 189.
- Camel, Hieroglyphick, Definition thereof, 163.
- Camelion, Hieroglyphick, Signification thereof, 166.
- Cancerizato, Term of Musick, Signification thereof, 538.
- Cannon, in Gunnery, Definition and Dimensions thereof, 84.
- Cannon, brass, the Weight, Length, Caliber of those antiently cast; of those that obtain in England, *ibid.*
- Canone Mieso, in Musick, Signification thereof, 538.
- Canone in Partito, Term of Musick, Signification thereof, 538.
- Canow, in Naval Architecture, Description thereof, 583.
- Cap, Hieroglyphick, Explication thereof, 167.
- Capades, in Hat-making, Method of making them, 107.
- Capella, Term of Musick, Signification thereof, 538.
- Capitane, Galley, in Naval Architecture, what, 584.
- Capiton, in Naval Architecture, great and little; Situation and Dimensions thereof, 577.
- Capitans, a Reformation of the Order of St. Francis, their Character and History, 670.
- Carabine, in Gunnery, Proportions thereof, 105.
- Caraites, anti nt and modern, a Sect among the Jews, their History, 266, 267.
- Caravanterai, Hospital, in Use in Turkey, Description thereof, 373.
- Cardinal Winds, in Navigation, History thereof, 516.
- Carrening a Ship, in Naval Architecture; Art thereof, 583.
- Carignan, Dutchy, in France, when and by whom instituted, 617.
- Carline, the biggest Piece of Timber in the Hold of a Ship, Dimensions thereof, 581.
- Carmelites, a religious Order, History thereof, 671, 672.
- Carminative Remedies, in Pharmacy, Definition thereof, their Manner of operating, 809.
- Carquasse, Furnace to melt the Materials for casting Looking-glasses, Description thereof, 4.
- Carriage of a Cannon in Gunnery, different Sorts thereof, 87.
- Carriage of a Field-piece, Description thereof, *ibid.*
- Carriage of Pieces for Places, Description thereof, *ibid.*
- Carriage for Ship-guns, Description thereof, *ibid.*
- Carriage, a Member of the Printing-Press, Description thereof, 986.
- Cartesian, Philosophy, System thereof, 901.
- De Cocedogon's Sentiment thereupon, 902.
- Cartesians, their Sentiment on the human Understanding, 412.
- Carthusian Monks, a religious Order, History thereof, 668.
- Cartouches, in Gunnery, different Forms, and Sorts thereof, Method of making them, 87.
- Carus, Disease, in Physick, Causes, Symptoms and Cure thereof, 918.
- Cassian, Author of the Semi-Pelagianism, his History and Errors, 149, 150.
- Calling of Cannon, in Gunnery, Art thereof, 100, 101.
- Calling large Looking-glass Plates; Art thereof, by whom invented, 5.
- Castor, Hieroglyphick, Explication thereof, 163.
- Cat, Hieroglyphick, Explication thereof, 164.
- Cataplasm, in Pharmacy, Definition thereof, 821.
- Cataplasms, anodyne, emollient, Preparation thereof, *ibid.*
- Catapulta, Machine of War, among the Antients, Description thereof, 106.
- Catastrophe of the Drama; Rules thereof, 965.
- Cathetus of Incidence, in Opticks, Definition thereof, 639.
- Catholicum simplex reformatum, in Pharmacy, Preparation and Virtues thereof, 856.
- Catholicum duplicatum, reformatum, Preparation and Virtues thereof, *ibid.*
- Catholicum Frambesarii, reformatum, Preparation and Virtues thereof, *ibid.*
- Catholicum Quercetani, Reformatum, Preparation and Virtues thereof, *ibid.*
- Catholicum pro Clysteribus, Reformatum, Preparation and Virtues thereof, *ibid.*
- Catoptrick Sittula; Method of making it, 639.
- Cavallini, a Painter of the Roman School, in Painting, his particular Talent, 759.
- Causal Propositions, in Logic, Rules thereof, 331.
- Cause, in Logic, Definition thereof, *ibid.*
- Cause, in Metaphysick, final, efficient, formal, material, 406.
- Celestial Magick, in Magick, Definition thereof, 366.
- Celestius, Disciple of Pelagius, his Errors, 143.
- Cephalians, their Hieroglyphicks, History thereof, 162.
- Cephalick Potion, in Pharmacy; Preparation and Virtues thereof, 814.
- Cephalick Remedies, in Pharmacy, Preparation and Virtues thereof, 808.
- Ceratum Album, in Pharmacy, Preparation and Virtues thereof, 881.
- Ceratum a Commotionem, cerebri, Preparation and Virtues thereof, *ibid.*
- Ceratum Barbarum, Preparation and Virtues thereof, *ibid.*
- Ceratum Diapyretes, Preparation and Virtues thereof, *ibid.*
- Ceratum Polychrestum, Preparation and Virtues thereof, *ibid.*
- Cerdon, Heresiarch, his Errors, 134.
- Ceremonies observed in giving the Habit of the Order of Malta, 680, 681. At the Election of a grand Master, 681, 682.
- Ceres, in Painting, how painted, 781.
- Cerinthians, Hereticks, their Errors, 132.
- Chain-Bullet, in Gunnery, Description thereof, 86.
- Chains, Hieroglyphick, Explication thereof, 168.
- Chaliffes, Hereticks, their Errors, 132.
- Chamberlains of the Exchequer, their Number and Office, 307.
- Champagne, a Painter of the French School, his particular Talent, Remarks on his Works, 792.
- Chancellor, High of England, his Office, Privileges, Duties, Rank, 304, 305.
- Chancellor of the Exchequer, his Office, Privileges, Duties, 306.
- Chancery, a Court, in Law, History and Rules thereof, 304.
- Chaperon, Piece of Heraldry, Description thereof, 121.
- Chaperonné, Term of Heraldry, Signification thereof, *ibid.*
- Characters of the Alphabet, in Grammar, divided into universal and particular, 57.
- Characters of the Alphabet, numeral among the Antients, History thereof, 64.
- Characters, Numeral among the Romans, History thereof, 65.
- Characters, Numeral of the Greeks, History thereof, *ibid.*
- Characters, Numeral of the French, History thereof, *ibid.*
- Characters, or Types, in Printing, Definition and Description thereof, 985.
- Charity, in Painting, how painted, 752.
- Charity, in Theology, Definition and Doctrine thereof, 1092, 1093, 1094.
- Charles I. King of England, in Painting, how painted, 751.
- Charles Vermader, a Painter of the Flemish School; his Character and particular Talent, 782.
- Charles Alphonse de Fresnoy, a Painter of the French School, his Character and particular Talent, 791. Remarks on his Works, 791, 792.
- Charles le Brun, a Painter of the French School, his History, Character, and particular Talent, 793. Remarks on his Works, 794.
- Chart, a Sea-Chart, three Kinds thereof, 586.
- Chart, plain, in Navigation, Definition thereof, rejected by Ptolemy, in his Geography, approved by others, how made and used, *ibid.*
- Chart of Mercator, in Navigation, how made, 587. Particularities thereof, 588. How used, *ibid.*
- Chartres, Dutchy in France, when, by whom erected, 616.
- Chase, in Hunting, Definition thereof, 190.
- Chase, Frank, Definition thereof, *ibid.*
- Chatel-Eraud, Dutchy in France, when and by whom erected, 616.
- Chateau Thierry, Dutchy in France, when and by whom erected, *ibid.*
- Chateau-roux, Dutchy in France, when and by whom erected, *ibid.*
- Chaulnes, Dutchy in France, when and by whom erected, *ibid.*
- Checky, an honourable Ordinary in Heraldry, according to Guillim, Description and History thereof, 113.
- Chevalier Leondar, a Painter of the Venetian School, his Character and particular Talent, 774.
- Chevalieresses of the Order of Malta, their History, 683, 684.
- Chevreuse, Dutchy in France, when and by whom erected, 617.
- Chevron, an honourable Ordinary in Heraldry, Description and History thereof, 112.
- Chicken-Pox, in Midwifry, Causes, Symptoms and Cure thereof, 489.
- Chief, Piece of Heraldry, Blazon thereof, 121.
- Chiminage, in Hunting, Signification thereof, 190.
- Chorinthians, their Hieroglyphicks, History thereof, 160.
- Chorus, in Musick, Signification thereof, 529.
- Chorus of the antient Tragedy, in Poetry, Definition and History thereof, 966. M. Dacier's Remarks thereupon, *ibid.*
- Christ's Passion in Incarnation, Effects thereof, 256, 257.
- Christian Religion, Origin and Progress thereof, 1001, 1002, 1003.
- Christopher Shouartze, a Painter of the Flemish School, his Character and particular Talent, 782.
- Chronology of the Grand Masters of the Order of Malta, 681, 682.
- of the Grand Masters of the Knights Templars, 687, 688.
- of the Grand Masters of the Order of St. Lazare, 689.
- of the Grand Masters of the Teutonic Order, 691, 692.
- of the Grand Masters of the Order of Calatrava in Spain, 693.
- of the Chief Sovereigns and Knight of the Holy Ghoil in France, 704, 705.
- of the Grand Masters of the Order of the Bath in England, 713.
- of the Sovereign Chiefs and Knights of the Order of the Garter in England, 716.
- of the Grand Masters of the Order of the Thistle in Scotland, 721.
- of the Sovereign Chiefs and Knights of the Order of the Golden Fleece in Spain, 727.
- of the Grand Master and Knights of the Order of the Annunciad in Savoy, 731, 732.
- Cimabue, a Painter of the Roman School, and Restorer of Painting in Italy, 759.
- Cinnabar, in Minerals, Definition thereof, 493.
- Native, Definition thereof, how distinguished from the artificial; its Uses, *ibid.*
- Artificial, how prepared, Uses thereof, *ibid.*
- called Vermillion, how prepared, *ibid.*
- blue, Preparation thereof, *ibid.*
- Circle, Hieroglyphick, Explication thereof, 167.
- Circolo, Term of Musick, Signification thereof, 538.
- Circolo Mezzo, Term of Musick, Signification thereof, 538.
- Circumferentor, Instrument used in surveying, Description and Use thereof, 1078.
- Cistercian Monks, a religious Order, History thereof, 666.
- Cisterns which contain the melted Matter for casting Looking-Glass Plates, Description thereof, 5.
- Citra, Term of Musick, Signification thereof, 538.
- Civil Law, Definition thereof, 275.
- Civil Wars excited by the Calvinists in France, Sketch thereof in Government, 46.
- Clair obscure, in Painting, Definition and Taste thereof, 741. Its Principles established by Andrew Boscoli, and Otho Venius, 742.
- Claudius Gellé, a Painter of the French School, his History, Character, and particular Talent, 794.

I N D E X to the S E C O N D V O L U M E.

- Claudius Vignon*, a Painter of the French School, his Character and particular Talent, 792.
- Clear and intuitive Vision of God; in God and his Attributes; Possibility thereof, 20, 21.
- Cleche, Term of Heraldry, Signification thereof, 121.
- Clementines*, in the Canon-Law; why thus called, and by whom published, 281.
- Clerk of the Crown, in Law, his Office, 365.
- in Chancery, their Number and Office, *ibid.*
- of the Court of King's Bench, their Office, 308.
- of the Papers in the King's Bench, his Office, *ibid.*
- of the Declarations in the King's-Bench, his Office, *ibid.*
- of the Signet in the King's-Bench, his Office, *ibid.*
- of the Rules in the King's-Bench, his Office, *ibid.*
- of the Bails in the King's-Bench, his Office, *ibid.*
- of the Errors in the King's-Bench, his Office, *ibid.*
- of the Docquets in the King's-Bench, his Office, *ibid.*
- of the Warrants in the Common-Pleas, his Office, 316.
- of the Essoigns in the Common-Pleas, his Office, *ibid.*
- of the Outlawries in the Common-Pleas, his Office, *ibid.*
- of the Juries in the Common-Pleas, his Office, *ibid.*
- of the Treasury in the Common-Pleas, his Office, *ibid.*
- of the Errors in the Common-Pleas, his Office, *ibid.*
- of the King's Silver in the Common-Pleas, his Office, *ibid.*
- of the Enrolments in the Common-Pleas, his Office, *ibid.*
- Clew-line of the Top-gallant of the Bow-sprit, in Naval Architecture, Length thereof, 574.
- of the Fore-top Mast; Length thereof, *ibid.*
- of the Fore-Mast; Length thereof, *ibid.*
- of the Main-top Mast; Length thereof, *ibid.*
- of the Main-Mast; Length thereof, *ibid.*
- of the Mizen-Mast, and Mizen-top-Gallant; Length thereof, *ibid.*
- Clifford's Inn*, in London, when, and by whom founded, and to what Purpose, 1195.
- Close, Term of Heraldry; Signification thereof, 121.
- Closet, Piece of Heraldry; Description thereof, *ibid.*
- Cloth, in Weaving; Art of Weaving it, 1200, 1201.
- Cluny*, a celebrated Abbey in France; History thereof, 667.
- Codex, in the civil Law; History thereof, 281, 282.
- Cottogon, De*, Author of this Work; his new System of the Formation of Metals; and his Refutation of that of Dr. Woodward, 392.
- His Refutation of the Sentiment of Boerhaave, on the general Nature of Metals, 393, 394.
- His Sentiment on the human Understanding, 412.
- His new System of the Formation and Phenomena of Thunder, 419.
- his new System of the Causes of Earthquakes, 435.
- His new System of the Object of Vision, 636.
- His new Philosophy, 905, 906.
- Côte*, Dutchy, in France; when, and by whom erected, 617.
- Cold, Disease, of Horses; how cured, 184.
- Colic, Disease, in Physick; different Sorts thereof, 914.
- Colleges of the University of Paris; their Number, Name, and Foundation, 1189.
- of the University of Orleans; their Number, Name, and Foundation, 1190.
- of the University of Angiers; their Number, Name, and Foundation, 1190.
- of the University of Oxford; their Number, Names, Foundation, Discipline, and Privileges, 1191.
- of the University of Cambridge; their Number, Names, Foundation, Discipline, and Privileges, 1192.
- of the University of St. Andrew, in Scotland; their Number, Names, Foundation, Discipline, and Privileges, 1197.
- of the University of Glasgow, in Scotland; their Number, Names, Foundation, Discipline, and Privileges, 1198.
- of the University of Aberdeen, in Scotland; their Number, Names, Foundation, and Discipline, 1199.
- of the University of Edinburgh, in Scotland; their Number, Names, Foundation, and Discipline, 1199, 1200.
- Colobarsius*, Heresiarch, his Errors, 135.
- Colour of Horses, in Horsemanship; different Sorts thereof, Signs of a good or bad Horse, 171.
- Colours for Japanning, how prepared, 133.
- Colours, in Opticks, original, heterogeneous, Definition of both, 630.
- Colours, Theory thereof, 631.
- Colours of thin Laminæ, or Plates; Definition and Theory thereof, 631, 632.
- Colours of natural Bodies; Theory thereof, 632.
- Colours, in Painting; different Sorts thereof, how prepared, mixed, and applied, 748, 749.
- Coma, Disease, in Physick; Causes, Symptoms, and Cure thereof, 918.
- Combatant, Term of Heraldry, Signification thereof, 121.
- Comma, in Grammar, Definition and Use thereof, 75.
- Commander of the Artillery, his Duties in a Siege, 98, 99.
- Commander, a Tool used in Hat-making; Description and Use thereof, 106.
- Comedy, in Poetry, Definition, Rules, and History thereof, 969.
- Commissary of Artillery, in Gunnery; his Duties in a Siege, 98, 99.
- Committees of the House of Commons, in England; how regulated, 49, 50.
- Common Musket, in Gunnery; Proportions thereof, 105.
- Common Navigation, in Navigation; Definition and Rules thereof, 585.
- Common Sea-Compass, in Navigation; Description and Use thereof, 585.
- by whom invented, 586.
- Common Needles, in Needle-making; Goodness thereof, 613.
- Common Viscibles, in Opticks; Definition and Theory thereof. Five Kinds of them according to Aristotle, 636.
- Common Cathartick, in Pharmacy; Preparation thereof, Remarks thereupon, 812, 813.
- Common Emulsion, in Pharmacy; Preparation thereof, 814.
- Common, or Sucking-Pump, in Hydraulicks; Description and Uses thereof, 205.
- Commons of the Parliament of England; their History, in Government, 49, 50.
- Companies of the City of London; History thereof, 54.
- Comparison, a Figure, in Rhetorick; Definition, Rules, and Examples thereof, 1015.
- Complex Term, in Logick; Rules thereof, 329, 330.
- Complexion, in Rhetorick; Definition, Rules, and Examples thereof, *ibid.*
- Company, Term of Heraldry; Signification thereof, 121.
- Composed Remedies, in Pharmacy; Definition and Preparation thereof, 807.
- Composed Propositions, in Logick; different Sorts thereof; their Rules, 331.
- Composing-Stick, in Printing; Description and Use thereof, 986.
- Compositor, in Printing; Rules of his Art, 987.
- Compound Interval, in Musick; Definition and Rules thereof, 570.
- Compound Harmony, in Musick; Definition and Rules thereof, 526.
- Compound Tense, in Grammar; Use thereof; how denoted in the Greek and Latin; how in the French and English; three Sorts thereof, 72.
- Conception, false, in Midwifery; Remarks thereupon, 438.
- Concert, in Musick; Definition and Rules thereof, 536.
- Concinnous System, in Musick, 511.
- Conclusive Conjunction, in Grammar; Definition and Use thereof, 73.
- Conclusion, in Logick; Rules thereof, 335.
- Concord, in Musick, simple, and compound; Rules thereof, 528.
- Concord, in Painting; how painted, 752.
- Conditional Futures, with Regard to God; what, 28.
- Conditional Conjunction, in Grammar; Definition and Use thereof, 73.
- Conditional Consent, in Sacraments; if sufficient to the Validity of Marriage, 1028.
- Confectio Narcotica*, in Pharmacy; Preparation and Virtues thereof, 854.
- Confectio Alkermes*; Preparation and Virtues thereof, *ibid.*
- Confectio Cardiaca Collegii Lugdunen.* Preparation and Virtues thereof, 854.
- Confection against Worms; Preparation and Virtues thereof, *ibid.*
- Confectio Cephalica*, Preparation and Virtues thereof, *ibid.*
- Confectio Pretiosa*, Preparation and Virtues thereof, 855.
- Confection against Melancholy; Preparation and Virtues thereof, *ibid.*
- Confectio hamet, reformata*, Preparation and Virtues thereof, 856.
- Confidence, in Painting, how painted, 752.
- Confirmation, in Sacraments; how called by the Antients; by whom conferred; retained in the Church of England, 1022.
- Conjunction, in Grammar; copulative, adverbative, causal, conclusive, conditional, continuative, disjunctive, dubitative, exceptive, Boileau's Sentiment thereupon, 73.
- Conjunctive Syllogism, in Logick; Rules thereof, 337.
- Consanguinity, in Sacraments; when an Impediment to Marriage, 1029.
- Consequent, in Logick; Definition and Rules thereof, 333.
- Conserve, in Pharmacy; Definition thereof, 826.
- Conserve of Violets, in Pharmacy; Preparation and Virtues thereof, *ibid.*
- Conserve of Roses; Preparation and Virtues thereof, *ibid.*
- Conserve of Flowers of Tussilage; Preparation and Virtues thereof, 827.
- Conserve of the Root of *Enula Campana*; Preparation and Virtues thereof, *ibid.*
- Conserve of Mallow Roots; Preparation and Virtues thereof, *ibid.*
- Conserve of Juniper-berries; Preparation and Virtues thereof, *ibid.*
- Consonanti, or Consonant Intervals, in Musick, Definition and Rules thereof, 510.
- Consonants, in Grammar; Division thereof into simple and double, liquid and mute, into five Classes, by the Hebrew Grammarians, five French labical Consonants, 57.
- Consumption, Tabes, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 924, 925.
- Contingent Futures, with Regard to God, two Sorts thereof, 27.
- Contradictories, in Metaphysick; Definition and Rules thereof, 405.
- Contradictory Propositions, in Logick; Rules thereof, 329.
- Contrary Propositions, in Logick; Rules thereof, *ibid.*
- Contusions of the external Parts of the Matrice, caused by the Delivery; how remedied, 472.
- Conventuals, a Branch of the Order of St. Francis; their History, 669.
- Conversion, a Figure, in Rhetorick; Definition and Examples thereof, 1015.
- Convex Mirrours, in Opticks; Description and History thereof, 639, 640.
- Cook's Room, in Naval Architecture; Situation, and Dimensions thereof, 577.
- Coptick* Language, in Grammar; History thereof; maintain'd to be a Mother Tongue by Kircher; Vossius and Simon's Sentiment thereupon, 79.
- Copper, in Metals; Definition, History, and Purification thereof, 396.
- Copulative Conjunction, in Grammar; Definition, and Use thereof, 73.
- Cordeliers*, a Branch of the Order of St. Francis; their History, 670.
- Cordial, or Cardiac Remedies, in Pharmacy; Preparation and Virtues thereof, 808.
- Cordial Potion, in Pharmacy; Preparation and Virtues thereof, 814.
- Cornelius Englebert*, a Painter, of the Flemish School; his Character and particular Talent, 782.
- Cornelius Schwartze*, a Painter, of the Flemish School; his Character and particular Talent, 684.
- Cornelius Polemberg*, a Painter, of the Flemish School; his Character and particular Talent, 685.
- Cornelius Jansinius*, Bishop of Ypres; his History, and Doctrine, 209, 210.
- Cornu Ammonis, a Stone, in Natural History; Description thereof, where found, 562.
- Coronet, in Heraldry; how blazoned, 115.
- Coronet of a Baron, Viscount, Earl, Marquis, Duke, Prince, *ibid.*
- of an Elector of the Empire, 116.
- Corrector of the Press, in Printing; his Office, 987.

I N D E X to the S E C O N D V O L U M E.

Cotice, or Cotise, Piece of Héraldry; blazon thereof, 122.

Cotton-Paper, in Paper-making; Method of making it, 798, 799.

Couchant, Term of Héraldry; Signification thereof, 122.

Covenant, in Law; Definition and Conditions thereof, 301.

Covenant between a Lessor and a Lessee, *ibid.*

Cough, Discafe, in Physick; Causes, Symptoms, and Cure thereof, 925.

Count, in Nobility; Definition thereof; by what Title distinguished in England, 618.

Counts, their Right, what originally, what among the Romans in the Time of the Commonwealth, under the Emperors, among the Franks and Germans; under the last of the second Race of the Kings of France, *ibid.*

Counts, their Quality, very different from what it was antiently; the Point of Precedence between them and Marquisses; how created by William the Conqueror; how created at present in England, 619.

———— a Sequel of their History, 620.

Counter-changed, Term of Héraldry; Signification thereof, 121.

Counter-cheveroned, in Héraldry, Signification thereof, 112.

Counter-Company, Term of Héraldry; Signification thereof, 121.

Counter-passant, Term of Héraldry; Signification thereof, 121.

Counter-point, in Musick; Definition thereof, 526.

Counter-saliant, Term of Héraldry; Signification thereof, 122.

Counter-tripping, Term of Héraldry; Signification thereof, 122.

Couped, Term of Héraldry; Signification thereof, 122.

Couple Close, Term of Héraldry; Signification thereof, 122.

Courant, Term of Héraldry; Signification thereof, *ibid.*

Courantine, in Pyrotechny; Method of making it, 993.

Courts of the Lord Mayor of London; History thereof, 53, 54.

Cousu, Term of Héraldry; Signification thereof, 122.

Creatures, in what sembable to God; Proofs of that Resemblance, 12, 13.

Crescent, Piece of Héraldry; Blazon thereof, 122.

Crest, in Héraldry; Blazon thereof, its Origin according to Herodotus; bore by the antient Warriors, 117.

Crinitus, his Sentiment on the Invention of the Hebrew Letters, in Grammar, 65.

Crocodile, Hieroglyphick; Signification thereof, 166.

Croissiers, a Religious Order; History thereof, 669.

Crozier, in Héraldry; Signification thereof, 166.

Cross, an honourable Ordinary, in Héraldry; Definition thereof, by Guillim; their different Contents; when first used in Armories, 110.

Cross wided, in Héraldry; Blazon thereof, Patee, Patee fitched, Patee on three Parts, Engrailed, Potencee, Fleury, Velane, Botone, Panel, &c. 110, 111.

Crossways, Term of Héraldry; Signification thereof, 122.

Crow, Hieroglyphick; Signification thereof, 165.

Crown, Hieroglyphick, Signification thereof, 167.

Crown, in Héraldry; Spanish, English, French, Description thereof, 116.

Crowns, to whom given in Antiquity; first Crowns, Form thereof. How used by the Argonothetæ, *ibid.*

Crowns of the Roman Emperors; four Kinds thereof, *ibid.*

Crowns, among the Romans, distributed as Rewards, *ibid.*

Crown, oval; Description thereof, *ibid.*

———— naval; Description thereof, *ibid.*

———— vallis; Description thereof, *ibid.*

———— mural; Description thereof, *ibid.*

———— civick; Description thereof, *ibid.*

———— triumphal; Description thereof, *ibid.*

———— obfudionalis; Description thereof, *ib.*

———— athletick; Description thereof, *ibid.*

Crown of Thorns of Jesus Christ, ransom'd by St. Louis, King of France, *ibid.*

Crudity, in Physick; Definition and Signs thereof, 913.

Cryer of the Court of King's Bench; his Office, 308.

Cryſtal Glaſſes, in Glaſs-making; how made, 3.

Crystalline Humour of the Eye, in Opticks;
Definition thereof, 625.
Ctesebes's Pump, in Hydraulicks; Definition,
and Use thereof, 205.
Cuogolo, a Sort of Pibbles, used in Glas-
making; where found, 2.
Cupid, in Painting; how painted, 751.
Currents, in Navigation; Definition, History,
and Theory thereof, 597, 598.
Curfitors Inn, in London; when, and by whom
founded, 1196.
Custos Brevium, in the Common Pleas; his
Office, 316.
Cutaneous Diseases; different Sorts thereof, 938.
Cut-water, in Naval Architecture; Proportions
thereof, 578.
Cylindrical, conical, parabolical, and ellepti-
cal Mirrours, how prepared; Theory there-
of, 642.
Cypress, Hieroglyphick; Explication thereof,
169.
Cyrus, Bishop of Jerusalem, a Monothelite; his
History and Errors, 154.

D.

D, Fourth Letter of the Alphabet, History thereof, 52.
— Its Signification among the numeral Characters of the Antients, 64.
D, Majuscule, in Musick; Use thereof, 539.
Dactyle, the Foot of a Verse, in Poetry; Rules thereof, 961.
Demons, in Mythology; their History, 550.
Dancette, Term of Heraldry; Signification thereof, 109.
Daniel Ricciarelli, a Painter of the Roman School; his Character and particular Talent, 768.
Daniel Segrey, a Painter of the Flemish School, his Character and particular Talent, 786.
Dative, a Case in Grammar; Definition and History thereof, 69.
David, in Painting, how painted, 751.
David Teniers, a Painter, of the Flemish School; his Character and particular Talent, 785.
David Taniers, the Younger, a Painter, of the Flemish School; his Character and particular Talent, 786.
Deacons, in Sacraments; their first Institution, Ordination, Office, 1023.
Declaration, in Law; Definition, and Form thereof, 311.
Declaration, its Defects, how remedied, *ibid*.
Decension, in Grammar; Definition and History thereof, 68, 69.
Decodction, in Pharmacy; Definition thereof, 811.
— bitter; Preparation and Virtues thereof, *ibid*.
— cephalick; Preparation and Virtues thereof, *ibid*.
— cordial; Preparation and Virtues thereof, *ibid*.
— deterfive; Preparation and Virtues thereof, 812.
— sudorifick; Preparation and Virtues thereof, 811.
Decree of Gratian, in Law; History thereof, 280.
Decrees in Chancery; Definition thereof, 305.
Decretals, in the Canon Law; History thereof, 280.
Deductione, Term of Musick; Signification thereof, 539.
Definition of Things, in Logick; two Sorts, and Rules thereof, 333.
Delivery, in Midwifry; laborious, difficult; Causes thereof, 456, 457.
Deliveries against Nature; whence they proceed, 459.
Demi, Term of Heraldry; Signification thereof, 123.
Demi-batoon, in Musick; its Value, 521.
Demi-Gods, in Mythology; their History, 549, 550.
Democracy, a Kind of Government; Definition and History thereof, 68.
Demonstrative Pronouns, in Grammar; Definition thereof, 68.
Dentrifick Remedies, in Pharmacy; Preparation and Virtues thereof, 808.
Depart, in Refining; Art thereof, 998, 999.
Derivative Words, in Grammar; what, 66.
Derwizer, in Mahometanism; their Character and History, 373.
Des Cartes's Hypothesis on the Virtues of the Magnet, 368.
Description of Colours, in Painting; Art thereof, 742.
Detail of the Artillery employed in a very famous Siege, 100.

Device, or Motto, in Heraldry ; Definition and History thereof, 117.

Dew, in Meteorology ; Theory thereof, 423.

Diadem, Hieroglyphick ; Explication thereof, 167.

Dialectical Places, in Logick ; what, 340.

Diamond, Hieroglyphick ; Explication thereof, 167.

Diamond, in Lapidary, Art of cutting them into a Brilliant, Rose, Table, 270.

———— their Goodness and Beauty how discovered ; how distinguished from other Stones, while rough ; where found, how dug, six Mines thereof, 271.

Diamonds, fictitious, made in France ; History thereof, 272.

Diana, in Painting ; how painted, 751.

Diaphoretick Remedies, in Pharmacy ; Virtues thereof, 807.

Diapré, Term of Heraldry ; Signification thereof, 123.

Diarrhæa, a Disease, in Physick ; Definition, Cure and Causes, Symptoms, thereof, 934.

Diatonick Chorus, of the System of the Antients, in Musick ; Table thereof, 511.

Diatonick Genus, in Musick ; Rules thereof, 516.

Dido, in Painting ; how painted, 751.

Diet of Worms, assembled on the Affair of Lutheranism ; Deliberations thereof, 348.

———— of Aulbourg, on the same Affair ; magnificent Entry of the Emperor Charles V. on that Occasion, 357. Deliberations thereof, 351, 352.

———— of Ratissbon, assembled on the same Affair ; Deliberations thereof, 355, 356.

———— the second of Ratissbon, assembled on the same Affair ; Deliberations thereof, 357, 358.

Diuretick Remedies, in Pharmacy ; Virtues thereof, 807.

Difference and Affinity of several Languages, in Grammar, 83.

Digest, in the Civil Law ; History thereof, 287.

Digestion, in Physick ; Definition thereof, 913.

Dii Pates, in Mythology ; their History, 549.

Dilemma, in Logick ; Definition, Rules, and Examples thereof, 339.

Diminution of the Chief, in the civil Law, less, middle, and greatest, 283.

Diophantus of Alexandria, in Mathematicks ; first Inventor of Algebra, 374.

Dioptricks, in Opticks ; Definition and Laws thereof, 643.

Diphthong, in Grammar ; Definition thereof, 58.

———— Greek and Latin ; how pronounced, *ibid.*

Diphthong, distinguished, in French and English, into those with Regard to the Eye, and with Regard to the Ear, *ibid.*

Diphthongs, English ; History thereof, *ibid.*

Diptote, in Grammar ; what, 67.

Discord, in Musick ; Rules thereof, 526.

Disease, in Physick ; Definition thereof, 970.

Diseases ; their original Cause, according to De Coetlogon, *ibid.*

Diseases of the Fluids ; Causes thereof, *ibid.*

Diseases of the animal Spirits ; Causes thereof, *ibid.*

Diseases of the Solids ; Causes thereof, 911.

Diseases, organical ; Definition and Causes thereof, *ibid.*

Diseases, hereditary ; what, 912.

———— endemical ; Definition thereof, *ibid.*

———— epidemical ; Definition thereof, *ibid.*

———— chronic ; Definition thereof, *ibid.*

Diseases of the Head ; their Number, Causes, Symptoms, and Cure, 917, 918.

Diseases of the Throat ; their Number, Causes, Symptoms, and Cure, 921, 922.

Diseases of the Thorax ; their Number, Causes, Symptoms, and Cure, 922, 923, 924.

Diseases of the Abdomen ; their Number, Causes, Symptoms, and Cure, 931, 932, 933.

Diseases of the Extremities ; their Number, Causes, Symptoms, and Cure, 936, 937, 938.

Diseases of the Eyes ; Cure thereof, 940.

Disinheritance of Children, in the civil Law, Conditions thereof, 289.

Disjunctive Propositions, in Logick ; Definition and Rules thereof, 331.

Disimulation, in Painting ; how painted, 752.

Distinction, in God and his Attributes, Definition thereof, 9.

Distinction, formal ; in God and his Attributes, *ibid.*

———— virtual ; Definition thereof, *ibid.*

Distinction, in Metaphysick ; two Kinds thereof, 403.

Disinc-

- Distinction, real; Definition and Division thereof, *ibid.*
 Distinction, adequate; Definition thereof, 404.
 Distinction of the Keys, in Musick; Rules thereof, 513.
Ditrick Barent, a Painter, of the Flemish School; his Character and particular Talent, 781.
 Divine Essence, in God and his Attributes; Definition thereof, 7. In what it consists essentially; not placed formally in the divine Understanding, 8.
 Divine Attributes, Definition thereof, how divided, how distinguished either between themselves, or from the divine Essence, 8, 9.
 Division of Things, in the civil Law; History thereof, 285.
 Division, in Logick; Rules thereof; 332.
 Division of Signs, in Logick, three Kinds thereof, 324.
 Division, in Rhetorick, Definition and Rules thereof, 1008.
 Divorce, in Sacraments, legitimate Causes thereof, 1033, 1034.
 Doe, in Hunting; his different Names, according to the Difference of his Age, 186.
 Dog, Hieroglyphick, Explication thereof, 163.
 Dogs, their Maladies; Number, Symptoms, and Cure thereof, 189, 190.
 Dogmatick Physicians, in Physick, their History, 941.
 Dolphin, Hieroglyphick, Explication thereof, 166.
Dominican Friars, a Religious Order; their History, 671.
Dominican Nuns, a Religious Order; their History, 675.
Dominick Gbirlandai, a Painter, of the Roman School; his Character and particular Talent, 760.
Dominico Zampieri, a Painter, of the School of Lombardy; his Character and particular Talent, 777. Remarks on his Works, *ibid.*
 Domesday, or Domesday-Book, in the Exchequer; History thereof, 307.
 Donation, in the Civil Law; Definition thereof, 288.
 Donation, occasioned by Death. Between Livings. On Account of Marriage; Conditions thereof, *ibid.*
 Dorick Mode, in Musick; Definition and Rules thereof, 516.
 Double Rhymes, in Poetry; Definition thereof, 978.
 Doubting, a Figure, in Rhetorick; Definition and Rules thereof, 1012.
 Dower, in Law, Definition thereof, what among the Goths; five Kinds thereof among the English, 303.
 Dower, by common Law, by Custom. *ex assensu Patris; de la plus belle*; three Things intitle to a Dower; how assigned at common Law, *ibid.*
Draco volans, in Meteorology; Theory thereof, 419.
 Drama, in Poetry, Definition, Rules, and History thereof, 964, 965.
 Draperies, in Painting, how to be managed according to the Figures, 741.
 Drift of a Forest, in Hunting; Signification thereof, 190.
 Dropsy, a Disease, in Physick; different Sorts thereof, their Causes, Symptoms, and Cure, 932.
 Drought, in Painting; Rules thereof, 741.
Druid, in Mythology, their History, 551.
 Dram, in Musick, Definition and Description thereof, 536.
Dryades, in Mythology, their History, 551.
 Dryades, in Painting, how painted, 752.
Du Breuil, a Painter, of the French School; his Character, and particular Talent, 788.
 Dukes, in Nobility, their History, 615.
 Dukes, in England, how stiled, 617.
 Dukes; sovereign Princes who bear that Title, *ibid.*
 Dulcimer, Instrument of Musick; Definition, and Use thereof, 536.
 Dun-Hounds, in Hunting; their Qualities, 187.
 Duration, in Metaphysick; Definition thereof, 404.
 Dysentery, a Disease, in Physick; Definition, Causes, Symptoms, and Cure thereof, 933, 934.
- E.
- E**, Fifth Letter of the Alphabet, and the second Vowel, how pronounced by the Greeks and Latins, 59.
 — by the English and French, 60.
 — whence its Figure, *ibid.*
- E, its Signification among the numeral Character of the Antients, 64.
 E, on the Key of an Organ, or Harpsichord, its Signification, 539.
 Earl Marshal of England; his Dignity and Office, in Nobility, 619.
 Earls, in England, how created, *ibid.*
 Earth, how represented, in Heraldry, 113.
 Earthquake, in Meteorology; Definition thereof, 431.
 Earthquakes, two Kinds thereof, according to Aristotle and Pliny; four Kinds, according to Agricola, *ibid.*
 Earthquakes, their Causes, according to the different Sentiments of Authors, 432.
 — their Phenomena, History thereof, 435, 436.
Easter Term, in Law, when it begins and ends; the Number of its Returns, 319.
Ebion, Heresiarch, his History and Errors, 133.
Ebionites, Hereticks, their History and Errors, *ibid.*
 Ecclesiastical Law, Definition thereof, 275. whence taken, 279.
 Eclogue, in Poetry; Definition, History, and Rules thereof, 974.
 Efficacious Grace, in Janseism; Definition thereof, whence it borrows its Efficacy, does not determine the Will physically, 229.
 — Its Conciliation with the human Will, 225.
 Egg, in Natural History, Definition and Description thereof, 567.
 Eggs, Oliver's and Bonetus's curious Remarks on those of Women, 568.
 Eggs, how hatched in Egypt, *ibid.*
Egyptians, their Hieroglyphicks, 160, 161.
Ekius, Professor of Theology at Ingolstadt; writes against Luther, 346.
Elbeuf, Dutchy, in France; when, and by whom erected, 616.
Electuarium Diacarthami, Preparation and Virtues thereof, 848.
Electuarium Orvictanum, Preparation and Virtues thereof, 853.
Electuarium Diaphysburis reformatum, Preparation and Virtues thereof, *ibid.*
Electuarium Diacordium Fracastorii reformatum; Preparation and Virtues thereof, *ibid.*
Electuarium Saffras reformatum, Preparation and Virtues thereof, 854.
Electuarium Pectorale, Preparation and Virtues thereof, 855.
Electuarium Scorbuticum, Preparation and Virtues thereof, *ibid.*
Electuarium contra Dysenteriam; Preparation and Virtues thereof, *ibid.*
Electuarium Teribinthinatum; Preparation and Virtues thereof, *ibid.*
Electuarium Aperient, Preparation and Virtues thereof, 857.
Electuarium Antihydopicum, Preparation and Virtues thereof, *ibid.*
Electuarium Diaturbith mineral; Preparation and Virtues thereof, *ibid.*
Elixirs, in Pharmacy; Definition and Theory thereof, 865.
Elixir proprietatis, Preparation and Virtues thereof, *ibid.*
Elixir pestilential, Preparation and Virtues thereof, *ibid.*
Elixir de tribus, Preparation and Virtues thereof, *ibid.*
Elixir Antiepileptick, Preparation and Virtues thereof, *ibid.*
Elixir Febrile, Preparation and Virtues thereof, *ibid.*
Elixir Citri, Preparation and Virtues thereof, *ibid.*
Elixir Sincopticum, Preparation and Virtues thereof, *ibid.*
Elixir vitrioli veneris, Preparation and Virtues thereof, *ibid.*
Elixir Nephreticum, Preparation and Virtues thereof, *ibid.*
Elixir Lithonripticum, Preparation and Virtues thereof, *ibid.*
Elixir Uterinum, Preparation and Virtues thereof, 867.
Elixir Antipodagricum, Preparation and Virtues thereof, *ibid.*
 Emerald, precious Stone, in Lapidary; Definition and History thereof, 273.
 Emeralds, several of an incredible Bigness; their different Value, according to their different Degrees of Beauty, *ibid.*
 Emetick Remedies, in Pharmacy; Theory thereof, 807.
 Emparlance, in Law, Definition thereof, 311.
Empedocles, in Painting, how painted, 751.
Empiricks, a Sect of Physicians; their History, 941.
- Emplastrum Diacholites*, Preparation and Virtues thereof, 882.
Emplastrum Diachilon album, Preparation and Virtues thereof, *ibid.*
Emplastrum Diachilon de Gummis, Preparation and Virtues thereof, *ibid.*
Emplastrum de Betonica, Preparation and Virtues thereof, 883.
Emplastrum Cephalicum, Preparation and Virtues thereof, *ibid.*
Emplastrum Divinum, Preparation and Virtues thereof, *ibid.*
Emplastrum Diaphysburis, Preparation and Virtues thereof, 884.
Emplastrum Regium, Preparation and Virtues thereof, *ibid.*
Emplastrum Dentium, Preparation and Virtues thereof, *ibid.*
Emplastrum pro Matrice, Preparation and Virtues thereof, 885.
Emplastrum Febrifugum, Preparation and Virtues thereof, *ibid.*
 Emption, and Vendition, in Law; different Kinds thereof, 293.
 Empyema, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 922.
 Emulsion, in Pharmacy, Definition thereof, 814.
 — common, Preparation and Virtues thereof, *ibid.*
 — astringent, Preparation and Virtues thereof, *ibid.*
 — pectoral, Preparation and Virtues thereof, *ibid.*
 — cooling and aperitive, Preparation, Virtues, and Doses thereof, *ibid.*
 Endless Screw, in Mechanicks, Definition, Description, Use, and Doctrine thereof, 380.
 Endorsed, Term of Heraldry, Signification thereof, 123.
 Enharmonick, a Gender, in Musick; History thereof, 511.
English, or English Tongue, History thereof, 80, 81, 82, 83.
English Navigation, Art thereof, 611, 612.
 Engrailed, Term of Heraldry, Signification thereof, 123.
 Ente, Term of Heraldry, Signification thereof, *ibid.*
 Environe, Term of Heraldry, Signification thereof, *ibid.*
 Epathick Epithema, in Pharmacy, Preparation and Virtues thereof, 819.
 Epenthesis, in Grammar, Definition thereof, 76.
 Epic Poem, in Poetry, Definition thereof, 963.
 Epic Poem, its Nature according to Sir R. Blackmore, Bossu, de la Motte, *ibid.*
 — Its History, 964.
 — Rules thereof, given by Boileau, *ibid.*
 Epic Action, its Unity, in what it consists, three Things requisite thereunto, according to Bossu, 964.
 — Importance thereof, *ibid.*
 Epicedion, in Rhetorick, Definition and Rules thereof, 1017.
 Epicœne, in Grammar, Definition thereof, 68.
Epicurean Philosophy, System thereof, 896.
 — Explication of that System, 897.
 Epigram, in Poetry, Definition and Rules thereof, 975.
 Epilaterion, in Poetry, History thereof, 963.
 Epilogue, in the Drama, Definition and Rules thereof, 966, 967.
 Epinicion, in Poetry, History thereof, 963.
 Episodes, in Poetry, Definition and Rules thereof, 966, 967.
 Episymphe, Term of Musick; Signification thereof, 539.
 Epithalamium, in Poetry, History thereof, 963.
 Epithema, in Pharmacy, Signification thereof, 819.
 Epithema, liquid, Use thereof, *ibid.*
 — solid, Use thereof, *ibid.*
 Epithema, liquid and cordial, Preparation and Virtues thereof, *ibid.*
 Epithema, liquid, for Children newly-born; Preparation and Virtues thereof, *ibid.*
 Epitrito, Term of Musick, Signification thereof, 539.
 Epode, in Poetry, Definition and Rules thereof, 974.
 Equality, in Painting, how painted, 753.
 Equinoctial Compass, in Navigation, Description and Use thereof, 592, 593.
 Equivocal Words, in Grammar, Definition and History thereof, 66.
 Erased, Term of Heraldry, Signification thereof, 123.
 Errata, in Printing, History thereof, 988.

Errhina, in Pharmacy, Definition and Use thereof, 815.
 Errhina, liquid, Preparation and Virtues thereof, *ibid.*
 Errhina, in Form of Unguent; Preparation and Virtues thereof, 816.
 — solid and atringent, Preparation and Virtues thereof, *ibid.*
 Erroneous Judgment, in the Court of Exchequer, by whom examined, 315.
 Escutcheon, in Heraldry; Etymology thereof, 109.
 Escutcheon of Pretence, Definition and Blazon thereof, *ibid.*
 Escutcheons, their Form among the English and French about two hundred Years ago, *ibid.*
 — how placed among the Antients, *ibid.*
 Espenon, Dutchy, in France, when, and by whom erected, 616.
 Esquire, in Nobility, Origin of the Name very obscure, 623.
 Esquires, in Nobility, their History, 623, 624.
 Essence, in Metaphysick, Definition thereof, 402.
 Essenians, a Sect among the Jews, their History, 265.
 Eßoin, or Eßoing, in Law, Definition and History thereof, 319.
 Estouteville, Dutchy, in France, when, and by whom erected, 616.
 Etampes, Dutchy, in France, when, and by whom erected, 616.
 Eternal Law, the Source of all others, different from Providence, 276.
 Eternity, in God and his Attributes, Definition thereof; Explication of the Definition, 18.
 Eternity, distinguished both from continued and discreet Time; how distinguished from Age, *ibid.*
 Eternity of God, Doctrine thereof contained in seven Verses of St. Prosper, 19.
 Ethiopian Tongue, in Grammar, History thereof, 83.
 Ethiopia, in Rhetorick, Definition and Division thereof, 1013.
 Etrees, Dutchy, in France, when, and by whom erected, 616.
 Euphorbium, in Pharmacy, Preparation thereof, 822.
 Evreux, Dutchy, in France, when, and by whom erected, 616.
 Euridice, her Figure, Hieroglyphick, Explication thereof, 170.
 Examiners, in Chancery, their Number and Office, 305.
 Exception, in Law, Definition thereof, 190.
 — three Kinds of Exceptions according to Civilians, *ibid.*
 Exchequer, in Law, Etymology thereof, according to Du Cange, Nicod, and Pithou, 307.
 Execution, in Law, Definition thereof, 314.
 Executions, two Sorts thereof, *ibid.*
 Existence, in Metaphysick, Definition thereof, 402.
 Exordium, in Rhetorick, Definition and Rules thereof, 1008.
 Expediate, in Hunting, Signification thereof, 190.
 Experimental Philosophy, System thereof, 904.
 Extraction of a dead Child, in Midwifry, how perform'd, 468.
 Extreme Unction, in Sacraments, History and Proofs thereof, 539.
 Eyes of Horses, their Maladies, Cure thereof, 185.

F.

F, The sixth Letter of the Alphabet, and fourth Consonant; how divided, how pronounced, 60.
 — Its Signification among the numeral Characters of the Antients, 64.
 F, in Musick, its Signification, 539.
 Fa, in Musick, Signification thereof, *ibid.*
 Fables, in Poetry, Definition, Division, and History thereof, 976, 977.
 Faith, necessary for Men for their Justification, Proofs thereof, 230.
 Faith, in Theology, Definition thereof, 1085.
 — Its Division into actual and habitual, 1086.
 Faith, habitual, Definition thereof, *ibid.*
 — actual, Definition thereof, *ibid.*
 False Conception, in Midwifry, Definition and Signs thereof, 438.
 — to whom it most commonly happens, 439.
 — how extracted, 469.
 Fame, in Painting, how painted, 752.
 Farce, in Poetry, what, according to Aristotle, of how many essential Parts it consists, according to the same, 967.
 Farce, Epic; to what confined according to Vol. II.

Bossu; how specified, according to the same, *ibid.*
 Farces, different at present from what they were originally, 970.
 Farcy, a Disease of Horses, Definition and Division thereof, 183.
 — Its Symptoms and Cure, 183, 184.
 Fargues, in Naval Architecture, Definition, Description, and Use thereof, 582.
 Fathers of the Oratory, a religious Congregation, History thereof, 674.
 Fathers of the Mission, a religious Congregation, History thereof, 675.
 Fathers of St. Lazarus, a religious Congregation, History thereof, *ibid.*
 Faustus Socinus, Heresiarch; his History and Errors, 159.
 Fealty, in Law, what; contains six Things, 303.
 Fealty, special; how performed in England, *ibid.*
 Feet, Hieroglyphick, Explication thereof, 161.
 Felicity, in Painting, how painted, 752.
 Feminine Rhymes, in the French Poetry; what, 978.
 Fence-Mouth, in Hunting, Signification thereof, 190.
 Fer de Mouline, in Heraldry, Signification thereof, 123.
 Fertility, in Painting, how painted, 752.
 Fesse, an honourable Ordinary in Heraldry; Blazon thereof, *ibid.*
 Fever, in Physick, Definition thereof, by Sydenham, Quincy, De Coetlogon, 925.
 — Explication of De Coetlogon's Definition, 925, 926.
 Fevers, their Causes, Symptoms, and Cure, 926.
 — their Division, 926, 927.
 — intermitting, their Causes, Symptoms, Prognostick, and Cure, 927.
 — Causes of the Intermision, according to De Coetlogon, 928.
 — malignant, Causes, Symptoms, and Cure thereof, *ibid.*
 Feuillants, a Religious Order, their History, 667.
 Feuillantine Nuns, a Religious Order, their History, 675.
 Fewmet, in Hunting, Signification thereof, 191.
 Fide-Jussures, in Law, History thereof, 292.
 Field, in Heraldry, Signification thereof, how charged, 109.
 Fifth-Rate Man of War, in Naval Architecture, Description thereof, 570.
 Figures, naked; when they can be used in Painting, 747, 748.
 Figure, in Rhetorick, Definition thereof, 1011.
 Figures, Division thereof into Figurés of Sentences, and Figures of Words, 1012.
 Figures of Sentences, Definition, Rules, and Examples thereof, 1012, 1013.
 Figures of Words, Definition, Division, Rules, and Examples thereof, 1013, 1014.
 Filazers, in the Court of Common Pleas, their Number, and Office, 816.
 Fillet, an Ordinary, in Heraldry; Blazon thereof, 123.
 Fimbriated, an Ordinary, in Heraldry; Blazon thereof, 123.
 First Rate English Man of War, in Naval Architecture; Description thereof, 570.
 Flag, in Navigation, Royal of France, Blazon thereof, 603.
 — of the French Gallies, Blazon thereof, *ibid.*
 — of the French Merchant Ships, both old and new, Blazon thereof, *ibid.*
 — of each Division of a French Fleet, Blazon thereof, *ibid.*
 — of the Admiral of England, Blazon thereof, *ibid.*
 — of the white Squadron, Blazon thereof, *ibid.*
 — particular of England, Blazon thereof, *ibid.*
 — red of England, Blazon thereof, *ibid.*
 — of England, called the Union, Blazon thereof, *ibid.*
 — new of the Union, Blazon thereof, *ibid.*
 — new of the Admiral of England, Blazon thereof, *ibid.*
 — of the Bowsprit of England, Blazon thereof, *ibid.*
 — of the East-India Company of England, Blazon thereof, 604.
 — of New England, in America, Blazon thereof, *ibid.*
 — of St. George, Blazon thereof, *ibid.*
 — of Scotland, Blazon thereof, *ibid.*
 — of Ireland, Blazon thereof, *ibid.*
 Flag Royal of Spain, Blazon thereof, 604.

Flag of the Spanish Gallies, Blazon thereof, *ibid.*
 — particular of Spain, Blazon thereof, *ibid.*
 Flag Royal of Portugal, Blazon thereof, *ibid.*
 — military of Portugal, Blazon thereof, *ibid.*
 — of Portuguese Merchant-Ships, Blazon thereof, *ibid.*
 — of Oporto, Blazon thereof, *ibid.*
 — particular of Portugal, Blazon thereof, *ibid.*
 Flag of Rome, Blazon thereof, *ibid.*
 — of the Pope, Blazon thereof, *ibid.*
 Flag of the Emperor of Germany, Blazon thereof, *ibid.*
 — of Flanders, Blazon thereof, *ibid.*
 — of Ostend, Blazon thereof, *ibid.*
 — of Brabant, Blazon thereof, *ibid.*
 Flag of the States General, Blazon thereof, *ibid.*
 — of the Bowsprit of the States General, *ibid.*
 — of Amsterdam, Blazon thereof, *ibid.*
 — of the East-India Company of Holland, Blazon thereof, *ibid.*
 — of the West-India Company, Blazon thereof, *ibid.*
 — of Zeland, Blazon thereof, *ibid.*
 — of Middlebourg, Blazon thereof, *ibid.*
 — of Fleßingues, Blazon thereof, 605.
 — of West-Frizeland, Blazon thereof, *ibid.*
 — of Rotterdam, Blazon thereof, *ibid.*
 — of Embdem, Blazon thereof, *ibid.*
 — of Bremen, Blazon thereof, *ibid.*
 — of Lubeck, Blazon thereof, *ibid.*
 — of Lunebourg, Blazon thereof, *ibid.*
 — of Wismar, Blazon thereof, *ibid.*
 — of Rostock, Blazon thereof, *ibid.*
 — of Stralsund, Blazon thereof, *ibid.*
 — of Stetin, Blazon thereof, *ibid.*
 Flag of Brandebourg, Blazon thereof, *ibid.*
 — of Dantzick, Blazon thereof, *ibid.*
 Flag of the King of Poland, Blazon thereof, *ibid.*
 — of Poland, Blazon thereof, *ibid.*
 Flag Royal of Sweden, Blazon thereof, *ibid.*
 Flag of Denmark, Blazon thereof, *ibid.*
 Flag Royal of Denmark, Blazon thereof, *ibid.*
 Flag of the King of Sardinia, Blazon thereof, *ibid.*
 — of the Duke of Modena, Blazon thereof, *ibid.*
 — of the Island of Corfica, Blazon thereof, *ibid.*
 — of Leghorn, Blazon thereof, *ibid.*
 — of the Gallies of Leghorn, Blazon thereof, *ibid.*
 — of Venice, Blazon thereof, 606.
 — of Mantua, Blazon thereof, *ibid.*
 — of Sicily, Blazon thereof, *ibid.*
 — of Malta, Blazon thereof, *ibid.*
 — of Naples, Blazon thereof, *ibid.*
 Flag of the Empress of Russia, Blazon thereof, *ibid.*
 — of Russia, Blazon thereof, *ibid.*
 — of the Russia Admiral, Blazon thereof, *ibid.*
 Flag of the Great Mogul, Blazon thereof, *ibid.*
 Flag of the Grand Seigneur, Blazon thereof, *ibid.*
 Flag of the Sophy of Persia, Blazon thereof, *ibid.*
 — of Tripoli, Blazon thereof, *ibid.*
 — of Salle, Blazon thereof, *ibid.*
 — of Tunis, Blazon thereof, *ibid.*
 — of the Corsairs of Barbary; Blazon thereof, *ibid.*
 Flagellants, Hereticks, their History and Errors, 158.
 Flamens, a particular Kind of Priests of the Heathen Divinities, in Mythology, when, and by whom instituted, their Number at first, 553.
 — their several Names, 554.
 Fleas, in Natural History, their Eggs, how deposited and hatched, 568, 569.
 Fleury, Term of Heraldry, Signification thereof, 123.
 Flooding, or Loss of Blood happening to Women in Labour, or after their Delivery; Causes, and Dangers thereof, how remedied, 470.
 Flowers, in Heraldry, how blazon'd, 113.
 Flute, Hieroglyphick, Explication thereof, 168.
 Flute, Instrument of Musick, Description and Use thereof, 534.
 Foci of Glasses, in Opticks, Laws thereof, 647.
 Focus, in Opticks, Definition thereof, 647.
 Foix Rendan, Dutchy, in France, when, and by whom erected, 617.
 Fomentation, in Pharmacy, Definition thereof, and how most commonly composed, 817.
 — emollient and cooling, Preparation thereof, *ibid.*

Fomentation for Dislocations and Contusions, Preparation and Virtues thereof, 817, 818.
 Force and Velocity of the Wind, in Meteorology, Theory thereof, 421.
 Forcing Pump, in Hydraulicks, Description and Theory thereof, 205.
 Formal Distinction in God and his Attributes, Definition thereof, 9.
 Fountain, artificial, in Hydraulicks, different Sorts thereof, 207.
 Fountain-playing by the Spring and Elasticity of the Air, Mechanism and Theory thereof, *ibid.*
 Fountain to play by the Pressure of the Water, Mechanism and Theory thereof, *ibid.*
 Fountain which spouts Water in various Directions, Mechanism and Theory thereof, *ibid.*
 Fountain playing by the Draught of the Breadth, Mechanism and Theory thereof, *ibid.*
 Fountain, the Stream whereof rises, and plays thro' a brass Ball, Mechanism and Theory thereof, *ibid.*
 Fountain which spouts Water in Form of a Shower, Mechanism thereof, *ibid.*
 Fountain which spreads Water in Form of a Table-cloth, Mechanism and Theory thereof, *ibid.*
 Fountain, which, when it has done spouting, may be turned into an Hour-Glass, Mechanism and Theory thereof, 208.
 Fountain, which begins to play upon the lighting of Candles, and ceases when they go out, Mechanism and Theory thereof, *ibid.*
 Fourth Rate Man of War, in Naval Architecture, Description thereof, 570.
 Fowler, Peter, Bishop of Antioch, his History and Errors, 153.
 Fox, Hieroglyphick, Explication thereof, 163.
 Fox, in Hunting; its different Names according to the Difference of its Age, 186.
 Fox-hunting, Art thereof, 195.
 Fra. Bassian, a Painter of the Roman School, his Character and particular Talent, 768.
 Francis Marli, called the Parmisan, a Painter of the Roman School, his Character and particular Talent, 766.
 Francis Primaticci, a Painter of the Roman School, his History, Character, and particular Talent, 768.
 Francis Vecelli, a Painter of the Venetian School, his Character and particular Talent, 772.
 Francis Albani, a Painter of the School of Lombardy, his Character and particular Talent, 778.
 Francis David, Heretick, his Errors, 159.
 Franciscans, a religious Order, History thereof, 669.
 Frank-Chase, in Hunting, Signification thereof, 190.
 Fratricelli, Hereticks, their History and Errors, 158.
 Frederick, Duke of Saxony, first Promoter of Lutheranism in Germany, 346, 347. Oblig'd Luther to appear before Cardinal Cajetan, *ib.* espouses his Interests at the Diet of Augsbouurg, and presents to the Emperor the Confession of Faith of the Lutherans, 351, 352.
 French Tongue, in Grammar, its Origin, Progresses, Improvements under Francis I. and Henry IV. Purity under Louis XIV. 79. Its Advantages over the other Languages, both ancient and modern, its Extensiveness, &c. 80.
 French-Horn, Instrument of Musick, Description thereof, how play'd upon, 537.
 Fresco, in Painting, History thereof, 749.
 Pretty, Term of Heraldry, Signification thereof, 123.
 Frog, Hieroglyphick, Explication thereof, 167.
 Frontac, Dutchy in France, when and by whom erected, 616.
 Fuga Doppia, in Musick, Definition and Use thereof, 539.
 Fugue, in Musick, three Kinds thereof, *ibid.*
 Fugue, single or simple, in Musick, Definition and Use thereof, *ibid.*
 Fugue, Curia, Authentick, Grave, Definition thereof, *ibid.*
 Fuses, in Gunnery, different Sorts thereof, for Granadoes and Bombs, how prepared, 93.
 Fust, Term of Heraldry, Signification thereof, 123.
 Fusilly, in Heraldry, Signification thereof, *ib.*
 Future Tense, in Grammar, Definition and Rules thereof, 72.

G.

G, the seventh Letter of the Alphabet, and the fifth Consonant, frequently changed into A by the Northern Nations. Found in part of C on several Medals, 60. Form thereof, taken from the Latins, 61. Its Sig-

nification among the numeral Characters of the Antients, 64.
 G, its Signification in Musick, 539.
 Gaddo Gaddi, a Painter of the Roman School, his particular Talent, 459.
 Galenical Pharmacy, reduced to three Operations, 809.
 Gallenists, a Sect of Physicians, their History, 941, 942.
 Galley, in Printing, Description thereof, 987.
 Galley, in Naval Architecture, different Sorts thereof, Description of its principal Parts, 584.
 Galleys of the King of France, where kept, by whom rowed, 584, 585.
 Garbé, Term of Heraldry, Signification thereof, 123.
 Gardant, Term of Heraldry, Signification thereof, *ibid.*
 Garter, King at Arms, in Heraldry, his Rank and Office, his Oath, 130.
 Gemara, an Explication of the Talmud, in Judaism, History thereof, 267.
 Gematria, in Judaism, Definition and History thereof, 268.
 Genders, in Grammar, Institution and Number thereof, frequently neglected in the oriental Languages, 68. How expressed by the Latins, Greeks, &c. by the French and English, their Number in the Eastern Languages, *ibid.* Masculine, Feminine, Neuter, Definition thereof, *ibid.*
 Genii, in Mythology, their History, 548.
 Genitive, a Case, in Grammar, Definition thereof, 68.
 Genius, in Mythology, what, among the Antients, 547.
 Genius, in Painting, Necessity thereof, 742.
 Gentil Belin, a Painter of the Venetian School, his History and particular Talent, 769. Remarks on his Works, 770.
 Gentleman, in Nobility, his Rank, 624.
 Genus, in Musick, three Sorts thereof, distinguished by the Antients, 516.
 Geometry, in Painting, how painted, 752.
 Georgion, a Painter of the Venetian School, his History and particular Talent, 770. Remarks on his Works, *ibid.*
 German Taste, in Painting, History thereof, 797.
 Gesture, in Rhetorick, how defined by Quintilian, in what it consists principally, 1017, 1018.
 Ging-Seng, a Plant, in Natural History, Description and History thereof, 558, 559. Its Virtues, and how prepared, 559, 560.
 Giotto, a Painter of the Roman School, his Character and particular Talent, 759.
 Girandola, in Pyrotechny, Art of making it, 994.
 Glass, in Glass-making, its Nature, according to Agricola, Fallopius, Dr. Merret, and De Coetlogon, 1. Its Origin, 6.
 Glass, several Sorts thereof, and different Methods of making them, 2, 3, 4.
 Glass-houses, in Glass-making, Description and Utensils thereof, 3.
 Glass-houses for casting Looking-glass-plates, Description and Utensils thereof, 4, 5.
 GLASS-MAKING, 1.
 Glaslopetra, a Kind of Stone, in natural History, Description and History thereof, 560, 561.
 Gnosticks, Hereticks, their History and Errors, 132, 133.
 Goat, Hieroglyphick, Explication thereof, 163.
 God and his Attributes, 7.
 God, how defined, *ibid.*
 God, the exemplary Form of all Things, 10.
 God's Attributes; what, 8.
 — how divided, how distinguish'd, 8, 9.
 God Eneph, Hieroglyphick, among the Egyptians, Explication thereof, 169.
 God Pan, Hieroglyphick, Explication thereof, *ibid.*
 God, in Mythology, Definition thereof, 547.
 Gods divided into several Classes, 545, 546.
 Gold in Metals, Definition, Weight, Value, and Characters, or Properties thereof, 394, 395. Where found, how taken from the Mines, 395.
 GOLD-BEATING, Art thereof, 36.
 Goodness of God, Proofs thereof, 13.
 Goods taken by Force, in Law, what, 204.
 Goose, Hieroglyphick, Explication thereof, 166.
 GOVERNMENT, Definition thereof, 37. Its Division into Monarchical, Aristocratical, and Democratical, *ibid.* Rules thereof, as proposed by De Coetlogon, *passim*.
 — French, History thereof, 44, 45, 46.
 — English, History thereof, 47, 48, 49, 50.

Government of Venice, History thereof, 51, 52.
 — of the United Provinces, History thereof, 52, 53.
 — of the City of London, 53, 54.
 — of the City of Paris, History thereof, 54.
 — in Painting, how painted, 752.
 Gout, a Disease, in Physick, Definition thereof, called by different Names, according to the Part affected, 936. Immediate Cause thereof, according to De Coetlogon, *ibid.* Its Periodical Paroxysms and extraordinary Symptoms accounted for by De Coetlogon, 937, 938.
 Grace, in Jansenism, Definition and Division thereof, 210.
 — *Gratum faciens*, Definition thereof, 212.
 — *Gratis data*, Definition thereof, *ibid.*
 — actual, habitual, Definition and Subdivision thereof, 213.
 — sufficient, Definition and Proofs thereof, 214, 215. Remarks thereupon, by De Coetlogon, 220, 221.
 — efficacious, Definition thereof, 223. Its manner of operating, Proofs thereof, 224, 225, 226.
 — in Painting, Utility thereof, 742.
 Gradation, in Rhetorick, Definition thereof, 1015.
 GRAMMAR, Treatise thereof, 54.
 Grammarians, their History, 83.
 Gramont, Dutchy, in France, when, and by whom erected, 616.
 Granado, in Gunnery, Description thereof, 92. Their different Preparation, and how they are charged, 92, 93.
 Granates, in Lapidary, several Sorts thereof, 274.
 Graving a Ship, in Naval Architecture, Art thereof, 579.
 Gravity, in Mechanicks, absolute, relative, Center thereof, 375.
 Gray's-Inn, in London, when, by whom, and to what Purpose founded, 1195.
 Greek Language, in Grammar, History thereof, 78.
 Green Hue, or Vert, a Term of Foreit, Signification thereof, 190.
 Gresham-College, in London, when, and by whom founded, and to what Purpose, 1196.
 Grey-hounds, in Hunting, their Qualities, how chosen, how bred, 187, 188.
 Gripes, a Disease of Children newly born, how cured, 485.
 Guelphs and Gibelins, two Factions in Italy, their History, 1123.
 Guida, in Musick, Signification thereof, 539.
 Gules, Colour, in Heraldry, Definition and History thereof, 108.
 GUNNERY, Treatise thereof, 84.
 Gun-powder, in Gunnery, different Sorts thereof, 85.
 Gun-room of a Ship, in Naval Architecture, Dimensions thereof, 577.
 Gutta Serena, a Disease of the Eyes, in Physick, Definition thereof, 940.
 Gutty, Term of Heraldry, Signification thereof, 123.
 Gypsum, in Painting, what, and how prepared, 575.

H.

H, The Eighth Letter of the Alphabet, and the sixth Consonant, how pronounced, according to *Martianus Capella*, 61.
 — whether it be a real Letter; not put by the Greek in the Lines with the other Letters; rejected by the Latins, *ibid.*
 H, two Kinds thereof, distinguished by Menage; antiently put for *ch*, *ibid.*
 — Signification thereof among the numerical Characters of the Antients, 64.
Habitudo and *Diffrentia*, Terms of Musick; Signification thereof, 539.
 Halo, in Meteorology, Definition and Theory thereof, 429.
 Hanneman, a Painter, of the Flemish School; his Character and particular Talent, 787.
 Hard Soap, in Soap-making, Method of making it, 1064.
 Hare, Hieroglyphick, Explication thereof, 165.
 Harmony, in Musick, Definition thereof, 505.
 Harmonies, their Number, and Preference, how determined, their necessary Conditions, 525.
 Harmony divided into simple and compound; into that of Concords and Discords, 526.
 HAT-MAKING, Art thereof, 106.
 Hats, when first seen in Europe, 107.
 Haubant, Term of Heraldry, Signification thereof, 123.

Harvyllet,

I N D E X to the SECOND VOLUME.

- Hanckbee*, M. his Reflections on the several Experiments made on the artificial Production of Light in Opticks, 627.
- Heavenly Bodies, in Heraldry, how blazoned, 113.
- Hebrew Language, the most antient of all Languages; Sentiment of *Alberti*, Dr. *Newman*, and *Loefcher* thereupon, 77.
- Regularity thereof; consists of 22 Letters, and of a great Number of Accents, Use of those Accents, *ibid.*
- Hebrew, Rabbinical, Sentiment of M. *Simon* thereupon, *ibid.*
- Hebrew Names, how declined, 69.
- Heirax, Heresiarch, in Heresies; his History, and Errors, 137.
- Hen, Hieroglyphick, Explication thereof, 166.
- Hemilia, Term of Musick, Signification thereof, 539.
- Hemorrhoides, or Piles, in breeding Women; Causes, Symptoms, and Cure thereof, 443.
- Henry Stewick, a Painter, of the Flemish School, his Character and particular Talent, 784.
- Henry Verfeure, a Painter, of the Flemish School; his Character and particular Talent, 787, 788.
- Henry Col, an English Painter, his Character and particular Talent, 795.
- HERALDRY, Treatise thereof, 107.
- Herbs, vulnerary, in Pharmacy; their Catalogue, 809.
- emollient, their Catalogue, *ibid.*
- Hercules, Hieroglyphick; Explication thereof, 166.
- HERESIES, Treatise thereof, 131, 132.
- Hermaphrodites, in Natural History; four Kinds thereof distinguished by Naturalists, 554.
- Dr. *Merret*'s Sentiment thereupon, *ibid.*
- Histories of real Hermaphrodites, 554.
- Hermaphrodite applied metaphorically to divers other Things besides the human Species, 555.
- Hermits, in Orders, several Sorts of them, 673.
- Hermits of Brittain, their History, *ibid.*
- of St. Jerom, their History, *ibid.*
- of St. Paul, their History, *ibid.*
- of St. John Baptist, their History, *ibid.*
- Heroes, in Mythology, their History, 549.
- whence the Word, 550.
- Herp, a cutaneous Disease, in Physick; divers Kinds thereof, 939.
- Hexameter Verses, in Poetry; their Definition and Rules, 260.
- Hexameron, a Work of the six Days, Treatise thereof, 1115, 1116, 1117.
- Hieroglyphical Books, what, 170.
- HIEROGLYPHICKS, Treatise thereof, 160.
- by whom invented, 170.
- Hieroglyphicks of the Egyptians, of the Christians, of the Corinthians, 160.
- Hilary Term, in Law, Number of its Returns, 319.
- Hog, Hieroglyphick, Explication thereof, 163.
- Hogarth, English Painter, his particular Talent, 795.
- Honey of Roses, in Pharmacy, Preparation thereof, its Virtues, 823.
- of Violets, Mint, Nenuphar, Mercurialis, Flowers of Rosmarin, Parietury, Helibore, and Raisins, Preparation and Virtues thereof, *ibid.*
- Hoof of a Horse, in Horsemanship, its Qualities, 170.
- Hope, in Painting, how painted, 752.
- Hope, a theological Virtue, in Theology; Doctrine thereof, 1092, 1091, 1092.
- Horatio Vecelli, a Painter, of the Venetian School, his Character and particular Talent, 772.
- Horn, a musical Instrument of the Wind Kind, in Musick; Description and Use thereof, 535.
- Horse, Hieroglyphick, Explication thereof, 160.
- Horse, in Horsemanship, Definition thereof, *ibid.*
- their Goodness, in what it consists, *ibid.*
- distinguished with Regard to their Colour, and with Regard to their Strain; Method of gelding them, How stabled and fed, How shod, How curried, How aired, *ibid.*
- HORSEMANSHIP, Definition and Art thereof, 170.
- Hoshatin, James, a Dominican Inquisitor, his Advice against Luther, 340.
- Hounds, in Hunting, different Kinds thereof, 187.
- Marks of their Goodness, How enter'd when young, *ibid.*
- Hugonots, a formidable Faction in France; Sketch of their History, 1123.
- Human Law, Definition thereof, 275. How divided, 279.
- Human Soul, in Metaphysick; its Nature, 408.
- Sentiment of the Epicureans thereupon, *ibid.*
- Its Knowledge; Doctrine thereof, 409.
- Its Immortality; how demonstrated, 409, 410.
- Human Understanding, in Metaphysick; Sentiment of Des Cartes, and De Coetlogon thereupon, 412.
- Humours of the Eye, in Opticks, their Number, 625.
- HUNTING, Definition thereof, how practised, 185.
- Hunting a Hart, 190. A Buck, 193. A Roe-buck, *ibid.* A Rein-Deer, Method thereof, *ibid.* A Hare, 193, 194. A Fox, 195. A Badger, 195, 196. An Otter, *ibid.* A Wolf, 197. A wild Boar, 197, 198. A wild Goat, *ibid.* Beavers, 199. A Bear, 198, 199. The Elk; Art thereof, *ibid.*
- Hunting used by the Antients, and by the Sicilians, 200.
- Hus, John, his History and Dogma's, 158.
- Huffites, their History and Dogma's, *ibid.*
- Hyacinth, a precious Stone, in Lapidary; four Sorts thereof, 273.
- distinguished besides into oriental and occidental, *ibid.*
- Hyæna, Hieroglyphick, Explication thereof, *ibid.*
- Hydraulic Machine, to extinguish Fire; Description thereof, 208.
- HYDRAULICKS, Definition and Doctrine thereof, 201, 202.
- Hydromel, in Pharmacy, Definition thereof, 827.
- common, Preparation and Virtues thereof, *ibid.*
- vinous, Preparation and Virtues thereof, *ibid.*
- HYDROSTATICKS, Definition and Doctrine thereof, 201, 202.
- Hygrometers, in Pneumatics, Definition and Description thereof, 957.
- Hygrometers, different Kinds thereof, how made, their Manner of acting, 957, 958.
- Hypochondriack, a Disease, in Physick, Causes, Symptoms, and Cure thereof, 931.
- Hysterick, a Disease, in Physick, Causes, Symptoms, and Cure thereof, 931.
- I.
- I**, The Ninth Letter of the English Alphabet, in Grammar; both a Vowel and a Consonant, 61.
- J, Consonant, how called by the Hebrews; two Kinds thereof among the French, and English; none among the Greeks, *ibid.*
- I, Vowel, how expressed by the Romans; Properties thereof according to Plato, *ibid.*
- I, its Signification among the numeral Characters of the Antients, 64.
- Iambick Verse, in Poetry, Definition and Rules thereof, 961.
- James Bellini, a Painter, of the Venetian School; his particular Talent, 769.
- Remarks on his Works, 770.
- James Robusti, called Tintoretto, a Painter, of the Venetian School; his History and particular Talent, 772.
- Remarks on his Works, *ibid.*
- James Palma, called Palma vecchio, a Painter, of the Venetian School; his Character and particular Talent, 774.
- James del Ponte, called Bassano, a Painter, of the Venetian School; his Character and particular Talent, 774.
- Remarks on his Works, *ibid.*
- James Fouquier, a Painter, of the Flemish School; his Character and particular Talent, 785.
- James Jordans, a Painter, of the Flemish School; his History and particular Talent, 787.
- James Blanchart, a Painter, of the French School; his History and particular Talent, 788.
- James Stella, a Painter, of the French School; his Character and particular Talent, 791.
- Remarks on his Works, *ibid.*
- JANSENISM, a new Sect, in France; History thereof, 209.
- Japanese Language, in Grammar; History thereof, 83.
- JAPANNING, Art thereof, 233.
- Ichnography, in Perspective; Definition thereof, 802.
- Iconoclastes, Hereticks, their History and Errors, 157.
- Idea, in Logick; Definition thereof, 320.
- Ideas, ours; Mr. *Locke*'s Opinion thereupon, refuted by De Coetlogon, 322.
- three Kinds thereof distinguished by the Cartesians, *ibid.*
- Ideas of Things, and Ideas of Signs, considered according to their Composition and Simplicity, 324.
- according to their Generality, Particularity, and Singularity, 325.
- Idyl, in Poetry; History and Rules thereof, 975.
- Jerom Mutiano, a Painter, of the Venetian School; his History and particular Talent, 773, 774.
- Jesuits, a religious Congregation, in Orders, their History, 674, 675.
- Jesus Christ's Conception, in Incarnation, 251, 252. His Nativity, 252, 253. Manifestation, 253, 254. Baptism, 254, 255. Doctrine, 254, Passion, 255. Death, 257. Burial, 257, 258. Descent into Hell, 258. Resurrection, 258, 259. Ascension, 260. Mission of the Holy Ghost, Proofs thereof, 261.
- Jiffant, Term of Heraldry, Signification thereof, 124.
- Iliack Passion, a Disease in Physick; Causes, Symptoms, and Cure thereof, 935.
- Images, in Rhetorick; recommended by Longinus, Examples thereof, 1016.
- Imbattelled, Term of Heraldry; Signification thereof, 124.
- Imitazzione, Term of Musick; Signification thereof, 539.
- Immenfity of God, in God and his Attributes, Doctrine and Proofs thereof, 15.
- a special Attribute of God, 17.
- Immutability of God, in God and his Attributes, Doctrine and Proofs thereof, *ibid.*
- Impaling, Term of Heraldry; Signification thereof, 124.
- Imperative, a Mood, in Grammar, 71.
- Imperfect Ideas of Painting; History thereof, 744.
- Imprecation, in Rhetorick, Definition and Examples thereof, 1012.
- Inartificial Arguments, in Rhetorick; Definition thereof, 1007.
- INCARNATION, a Mystery of the Christian Religion, called by several different Names by the antient Fathers; considered in two Manners, 235.
- can be demonstrated possible; Proofs thereof, 236.
- can be proved positively, 237.
- effectual Cause thereof, 242.
- its general End, 245.
- Incessus, walking, in Rhetorick; Rules thereof, 1018.
- Incomplete Phrase, in Grammar; Definition and History thereof, 75.
- Indian Sattins, in Weaving; Goodness and Beauty thereof, 1206.
- Indications, in Physick; Definition thereof, 914.
- curative, Definition thereof, and Remarks thereupon, *ibid.*
- palliative, Definition thereof, and Remarks thereupon, *ibid.*
- preservative, Definition thereof, and Remarks thereupon, *ibid.*
- vital, Definition thereof, and Remarks thereupon, *ibid.*
- Indications, counter, in Physick; Definition thereof, and Remarks thereupon, 912, 913.
- Indicative, a Mood, in Grammar, 71.
- Indices, or expurgatorii Indices, Catalogues of prohibited Books; their History, 159.
- Indorsed, Term of Heraldry; Signification thereof, 124.
- Inescutcheon, Term of Heraldry; Signification thereof, 124.
- Infinitive, a Mood, in Grammar, 71.
- how distinguished in the antient and modern Languages, 72.
- Inflammation of the Matrice, in Midwifry, Signs, and Cure thereof, 474.
- Inflammation of the Navel of a new-born Child; Causes and Cure thereof, 483.
- Inflammation of the Groins, Buttocks, and Thighs of a new-born Child; Causes and Cure thereof, 484.
- Ingrailed, Term of Heraldry; Signification thereof, 124.
- Inheritance, by an Intestate, in Law; Doctrine thereof, 290.
- Inanimate Contract, in Law; Definition thereof, 291.
- Inosolious Testament, in Law, what, 290.
- Inno-

INDEX to the SECOND VOLUME.

- Innocence, in Painting; how painted, 752.
 Institution of Heirs, in Law, Doctrine thereof, 289.
 Instrumental Musick, Definition and Theory thereof, 531.
 Instruments, in Musick, two Kinds thereof, *ibid.*
 Interjection, in Grammar; Definition and History thereof, 73.
 Interrogation, a Figure in Rhetorick, Definition and History thereof, 1008.
 Invecked, Term of Heraldry, Signification thereof, 124.
 Invention, in Law; Doctrine thereof, 286.
 Invention, in Rhetorick; Definition thereof, 1007.
 Inventory, in Law; Definition thereof, 290.
 Invisibility of God, Doctrine and Proofs thereof, 20.
Joachim Sandrat, a Painter, of the Flemish School; his History and particular Talent, 787.
John Brentius, a Confessionist; his Errors, 158.
John Angelick, a Painter, of the Roman School; his Character and particular Talent, 760.
John Francis Penni, a Painter, of the Roman School; his Character and particular Talent, 764.
John of Udine, a Painter, of the Roman School; his History and particular Talent, 767.
John Bellini, a Painter, of the Venetian School; his particular Talent, 770.
John Antony Rigillo, called *Pordenon*, a Painter, of the Venetian School; his History and particular Talent, 773.
John Vandeyck, a Painter, of the Flemish School; his History and particular Talent, 779.
John Mabuse, a Painter, of the Flemish School; his History and particular Talent, 780.
John Olbeir, a Painter, of the Flemish School; his History and particular Talent, *ibid.*
John Cornelius Vermeyen, a Painter, of the Flemish School; his History and particular Talent, *ibid.*
John Bol, a Painter, of the Flemish School; his History and particular Talent, 781, 782.
John Stradan, a Painter, of the Flemish School; his Character and particular Talent, 782.
John Dac, a Painter, of the Flemish School; his particular Talent, *ibid.*
John Rotenmar, a Painter of the Flemish School; his particular Talent, *ibid.*
John Torontius, a Painter of the Flemish School; his History, and particular Talent, 785.
John Lanfranc, a Painter of the School of Lombardy; his Character, and particular Talent, 777. Remarks on his Works, 777, 778.
John Cousin, a Painter of the French School; his particular Talent, 788.
John Hoskins, an English Painter; his particular Talent, 788.
John Riley, an English Painter; his particular Talent, *ibid.*
Jouff, Dutchy, in France; when, and by whom erected, 616.
 Irony, Figure in Rhetorick; Definition and Examples thereof, 1014.
 Irregular, or anomolous Verbs, in Grammar; where the Irregularity lies in English, 71.
Isaac Fuller, an English Painter; his particular Talent, 795.
 Illuant, Term of Heraldry; Signification thereof, 124.
 Issue, in Law, Distinction thereof, 313.
 Issue, general; Definition thereof, *ibid.*
 — special; Definition thereof, *ibid.*
 Italian Language, in Grammar; History thereof, 80.
 Judaism, History thereof, 264, 265.
 Judgment, in Law; Definition and History thereof, 314.
 Juice, in Pharmacy; how extracted, 824.
 — black, of Liquorice; Preparation thereof, *ibid.*
 — white of Liquorice; Preparation thereof, *ibid.*
 Julep, in Pharmacy; Definition thereof, 813.
 — pectoral; Preparation, Doses, and Virtues thereof, *ibid.*
 — hystrick; Preparation, Doses, and Virtues thereof, 813, 814.
 — tartid hystrick; Preparation, Doses, and Virtues thereof, 814.
 — camphorate hystrick; Preparation, Doses and Virtues thereof, *ibid.*
Julio Romano, a Painter of the Roman School; his History, and particular Talent, 764.
Julio Lucino, called *Pordenon the Younger*, a Painter of the Venetian School; his History, and particular Talent, 774.
 July, Month, in Painting, how painted, 752.
 Jumelle, a double Cannon, in Gunnery; Invention, and Description thereof, 85.
 June, a Month, in Painting; how painted, 752.
 Jurisprudence, in Law; Definition thereof, 282.
 Jurors, in Law, how impanelled, both in civil and criminal Cases; their History, 313.
 Justice, and Law; Definition and History thereof, 282.
 Justification, in Jansenism; Definition thereof, 229.
 Justification, first active; Definition thereof, *ib.*
 — first passive; Definition thereof, *ib.*
 — second active; Definition thereof, *ib.*
 — second passive; Definition thereof, *ib.*
 Justification of the Impious; how effected, *ib.*
 Justification; Disposition required to it, 229, 230.
 K.
 K, the tenth Letter of the Alphabet, and a double Consonant, in Grammar, 61.
 borrowed from the Greek *Kappa*; a superfluous Letter, according to *Prescian*, unknown to the antient Romans; Remarks of *M. Beger* thereupon, *ibid.*
 K, has various Significations; never used by the French; Remarks of *Ablancourt* thereupon, *ibid.* Much used in the English, *ibid.*
 Its Signification among the numeral Characters of the Antients, 64.
 Kalig-ashes, used in Glass-making, 5.
 KEBER, Name of a Sect among the Persians; History thereof, 269.
 Keel of a Ship, in naval Architecture; how placed well on the Stocks, 582.
 King's Evil, a Disease, in Physick; Causes and Cure thereof, 930. History of couching for it, *ibid.*
 Keys, in Musick; Invention, and Doctrine thereof, 512.
 Keys, their Distinction, into sharp and flat; Remarks of *Mr. Malcolm* thereupon, 513.
 L.
 L, the eleventh Letter of the Alphabet, and a Semi-vowel; Remarks of *Pasferat* thereupon, 62. Its Signification among the numeral Characters of the Antients, 64.
 Label, an honourable Difference in Heraldry; Blazon thereof, 115.
 Lacedemonians, their Hieroglyphicks; Explication thereof, 167.
 Laconic Style, in Rhetorick; Definition, Rules and Examples thereof, 1011.
 La Ferte Senneterre, Dutchy, in France; when and by whom erected, 617.
 La Force, Dutchy in France; when, and by whom erected, 616.
 Lambrequin, Term of Heraldry; Signification thereof, 124.
 La Meilleraye, Dutchy in France; when, and by whom erected, 617.
 Language, in Grammar; Definition thereof, 76.
 Languages, their first Principles, according to *Father Bussier*; their Use, as defined by *Vaugelas*; their Diversity whence it arose, *ib.*
 Antiquity and Priority between them, much controverted, 77. Their Division, *ibid.*
 Langued, Term of Heraldry; Signification thereof, 124.
 LAPIDARY, Art thereof, 270, 271.
 Lapidaries, in Europe, their Manner of examining their rough Diamonds, 271.
 Lares, in Mythology; Definition thereof, 548.
 Lares, distinguished by *Plutarch*, into Good and Evil, *ibid.*
 Lares, Domestick, what, according to *Aquilius*, *ibid.*
 — publick; their Office, *ibid.*
 — private; their Office, *ibid.*
 — of Cities; their Office, *ibid.*
 Lares, their Origin; when first worshipped, and on what Occasion, according to *Tertullian*; Victims offered to them, *ibid.*
 Largo, Term of Musick; Signification thereof, 539.
 Latin Language; History thereof, 78, 79.
 La Trappe, in Orders; a Reformation of the Order of Citeaux; History thereof, 667, 668.
 Laughter, in Painting; how painted, 752.
 Law, Definition and Etymology thereof, 275.
 — called by five different Names, *ibid.*
 — either natural or positive, *ibid.*
 Law, positive, Definition thereof; either divine or human, *ibid.*
 Law, divine; Definition thereof, either antient or new, *ibid.*
 Law, antient or old; Definition thereof, *ib.*
 — its Precepts, 278.
 — new; Definition thereof, 275.
 — its Precepts, 279.
 Law, human; either ecclesiastical or civil, 275.
 Law, ecclesiastical; Definition thereof, *ibid.*
 — civil; Definition thereof, *ibid.*
 Law, Matter subject to it, 275, 276.
 Law, eternal; History thereof, 276.
 — natural History thereof, *ibid.*
 — Precepts thereof, 277.
 Law of Nations, Definition thereof; and Explication of the Definition, *ibid.*
 — Precepts thereof, 277, 278.
 Law, *falcidian*; Doctrine thereof, 290.
 Laws, three of the local Motion, established by the Cartesians; Doctrine thereof, 335.
 Laws of the Foci of Glasses, in Opticks; and the Method of finding them, 647, 648.
 Law, in Painting; how painted, 752.
 Lead, in Metals; Definition thereof, 598.
 — where, and how found, how melted; Reflections of the Naturalists thereupon, *ib.*
 Leaf, in natural History; Definition and Description thereof, 569.
 League, famous of Smalcalde, in Lutheranism; History thereof, 353.
 Leaves, how considered by Botanists, 569.
 Leaves, annual; Definition thereof, *ibid.*
 — crenated; Definition thereof, *ibid.*
 — dissimilar; Definition thereof, *ibid.*
 — procumbent; Definition thereof, *ibid.*
 — segment; Definition thereof, *ibid.*
 — vernal; Definition thereof, *ibid.*
 Ledger Lines, in Musick; what, 533.
 Lediguieres, Dutchy in France; when, and by whom erected, 616.
 Legacy, in Law; Definition and Doctrine thereof, 290.
 Lemures, in Mythology; their History, and Remarks thereupon, 549.
 Lens in Dioptricks; various Figures thereof, 645.
 Lenses, in Dioptricks; distinguished into Ground and Blown, 646.
 — convex; Laws of Refraction with respect to them, *ibid.*
 — concave; Laws thereof, 647.
 Leonardo da Vinci, a Painter of the Roman School; his History, and particular Talent, 761. Remarks on his Works, 762.
 Leonian Society, in Law; what, 293.
 Leprosy, a cutaneous Dilemper, in Physick; History, Causes, Symptoms, and Cure thereof, 938, 939.
 Letters of the Alphabet; their History, 59, 60.
 Letters Patent, in Chancery; History thereof, 306.
 Lever, in Mechanicks, Definition and Description thereof, 376. Three Things to be considered in a Lever, *ibid.*
 Levers, three Kinds thereof, *ibid.*
 Levers of the first Kind; Theory thereof, *ibid.*
 — of the second Kind; Theory thereof, *ibid.*
 — of the third Kind; Theory thereof, *ib.*
 Leviner, or Leymer, a hunting Dog; its Qualities, 188.
 Liancourt, Dutchy, in France; when, and by whom erected, 617.
 Liberty, in Metaphysick, Definition thereof; two Sorts of Liberty, 415.
 Liberty from Coaction; Definition thereof, and Remarks thereupon, *ibid.*
 Liberty from Necessity; Definition thereof, and Remarks thereupon, *ibid.*
 Lientry, a Disease, in Physick; Causes and Cure thereof, 934.
 Light, in Opticks; Nature thereof, as explained by *Aristotle*, the *Cartesians*, and *F. Malebranche*, 625, 626.
 — by the *Newtonians*, 626.
 Light, Reflexion and Refraction thereof, 627, 628.
 Light, but three Affections thereof, 629.
 Line of equal Parts, or Line of Lines, marked on the Sector, or Compass of Proportion; how divided and subdivided, on which Side of the Compass found, how numbered, 593.
 Line of Cords; how divided and numbered, *ib.*
 Line of Tangents; how divided and numbered, *ibid.*
 Line of Secants; how divided and numbered, *ibid.*
 Line of Polygons; how divided and numbered, *ibid.*
 Line, in Navigation, Sounding; two Sorts thereof; its Description and Use, 587.
 Line of the Log; Description and Use thereof, 594.
 Line for Linen Cloth, in Weaving; how prepared, 1207.
 Lines, in Perspective; different Sorts thereof, 802.
 Linen Cloth, in Weaving; different Sorts thereof, 1207.
 Linen

I N D E X to the S E C O N D V O L U M E.

Linen Manufacture, in Weaving, History thereof, *ibid.*
 Lion rampant, Hieroglyphick; Explication thereof, 162.
 Lions set to the Chariot of *Cybel*, Hieroglyphick; Explication thereof, *ibid.*
 Lions, how borne in Heraldry, 113.
 Lion's Skin, Hieroglyphick; Explication thereof, 162.
 Lionses, Hieroglyphick; Explication thereof, *ibid.*
Lippo of Florence, a Painter of the Roman School; his History, and particular Talent, 760.
 Liquids, in Grammar; what, 58.
 Local Motion, in Mechanics; Affections, Causes, &c. thereof, 381.
 Location Conduction, in Law; Definition thereof, 293.
 Location, tacit, in Law, Definition thereof, *ib.*
 Log, in Navigation; Description and Use thereof, 594.
 Logic, Definition and Division thereof, 320.
 Longitude, in Navigation, the Invention thereof of a true Powder of Projection; of what Utility, if it was found, 600.
 — various Methods of finding it at present, 600, 601.
 Looch, in Pharmacy; Definition thereof, 837.
 — pectoral; Preparation and Virtues thereof, *ibid.*
 — to stop Vomiting; Preparation and Doses thereof, *ibid.*
 — of red Cabbages; Preparation and Virtues thereof, *ibid.*
 — of Squill; Preparation and Virtues thereof, *ibid.*
 — of Poppies, Preparation and Virtues thereof, *ibid.*
 — of Garlick; Preparation and Virtues thereof, *ibid.*
 — of Jar-Raisins; Preparation and Virtues thereof, *ibid.*
 — of Althæa; Preparation and Virtues thereof, 837, 838.
 Lotion, in Pharmacy; Definition and Use thereof, 818.
 Lotion to kill Lice in the Head; Preparation thereof, *ibid.*
 Lotion to render red Hairs black; Preparation thereof, *ibid.*
Loudun, Dutchy, in France; when, and by whom erected, 616.
Louis XIV. King of France, in Painting; how painted, 751.
 Lozange, an honourable Ordinary, in Heraldry; Blazon thereof, 124.
 Lozangy, Term of Heraldry; Signification thereof, *ibid.*
Luca Signorelli, a Painter, of the Roman School; his History and particular Talent, 761.
Lucas of Leyden, a Painter, of the Flemish School; his Character and particular Talent, 780.
Luther, Martin, Author of Lutheranism, his Birth and Education; begins to preach his new Doctrine, on what Occasion, 346.
 — appears before the Pope's Legate, 346, 347.
 — forty one of his Propositions condemned by the Pope, 347.
 — appears at the Diet of Worms, and is banished by the Emperor, 348.
 — is condemned by the Sorbonne, to whom he had appealed, and submitted his Writings, 349.
 — his Treatment of *Henry VIII.* King of England, *ibid.*
 — marries a Nun, 350.
 — writes several Things against the Emperor and Bishops, 353.
 — died of an Indigestion at *Isbel*, the Place of his Birth; his Character, 357.
 LUTHERANISM, History thereof, 347, 348.
 Lyre, Hieroglyphick; Explication thereof, 168.

M.

M, A liquid Consonant, and the twelfth Letter of the Alphabet; how pronounced, 62.
 — Remarks of Quintillian thereupon, *ibid.*
 — Its Signification among the numeral Characters of the Antients, 64.
 Macaronick Poetry, History thereof, 978.
Macedonius, Heresiarch, his History and Errors, 138.
 Machines, in Mechanics; two Sorts thereof, 375.
 — simple, six Sorts thereof, *ibid.*
 — compound, their Number almost infinite, *ibid.*

MAGICK, Treatise thereof, 363, 364.
 Magna Charta, in Law, the Basis of the English Liberties; History thereof, 306.
 MAGNET, Treatise thereof, 366, 367.
Mahomet, the Impostor; his History, 371.
Mahomet, in Painting; how painted, 757.
 MAHOMETANISM, History thereof, 371, 372, 373.
Mahometans, their Theology, 372.
Maille Luyues, Dutchy, in France; when, and by whom erected, 616.
 Man of War, in Naval Architecture, its several Dimensions, 570, 579.
 Mandate, in Law, Doctrine thereof, 294.
 Manganese, a Kind of Pseudo-Load-stone, which enters the Composition of Glass; where found, 2.
 Mania, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 919.
Manicheans, Hereticks; their History and Errors, 136, 137.
 Manner of Things, or Modes in Logick; Definition and Doctrine thereof, 322, 323.
 Manner of treating a Child, newly born, in Midwifery, 479.
 Manner of hindering Children from being quintey'd, awry, crooked, and lame, in Midwifery, 491.
 Manners, in Poetry; Definition and Rules thereof, 968, 969.
 Mantle, in Heraldry, Blazon thereof, 124.
 Manumission, by Testament, in Law; three solemn Manners of Manumission, 283.
 Marcasite, in Natural History, History thereof, 753.
Marcian, Heresiarch, his History and Errors, 134.
 Mares, in Horsemanship; the fittest to breed out of, 172.
 — how kept during the Time of their being with Foal, 173.
 Mark, Heretick; his History and Errors, 135.
Mariotte, his Experiments on Hydraulicks, 204.
 Marriage, Maritagium, in Law; Signification thereof, 285.
Martin de Vos, a Painter, of the Flemish School; his particular Talent, 782.
 Martlets, honourable Ordinary, in Heraldry; Blazon thereof, 124.
 Mascle, honourable Ordinary, in Heraldry; Blazon thereof, *ibid.*
 Massoned, Term of Heraldry; Signification thereof, *ibid.*
 Mast, in Naval Architecture; Proportions thereof, 570.
 Masts, their Number in a Ship, *ibid.*
 — Main, its Position and Rigging, *ibid.*
 — Fore, its Position and Rigging, *ibid.*
 — Mizzen, its Position and Rigging, *ibid.*
 — Bow-sprit, its Position and Rigging, *ib.*
 Master of Musick, his Skill, in what it consists, 529.
Master Roux, a Painter, of the Roman School, his History, and particular Talent, 782.
 MATHEMATICKS, Definition and Division thereof, 374.
 Mathematicks, speculative, Definition thereof, *ibid.*
 — practical, pure, mixed; Definition thereof, *ibid.*
 — their Origin, *ibid.*
 Matrimony, in Sacraments; Treatise thereof, 1027, 1028, 1029.
Matthew and Paul Bril, Painters, of the Flemish School, their particular Talent, 782.
 MECHANICKS, Treatise thereof, 375, 376.
 Medicines, in Physick, Definition and Division thereof, 915.
 — their Manner of operating, mechanically explain'd, 915, 916.
 — refuted by *De Coetlogon*, 916.
Melpomene, in Painting, how painted, 751.
 Melting Pots to contain the Materials for Looking-Glass Plates; their Bigness and Use, 3.
 Membred, Term of Heraldry; Signification thereof, 124.
 Memorial, presented to Don Pedro, Prince of Portugal, by one of his Ministers, on the insulting Conduct of Spain, 1156, 1157.
 Memory, in Rhetorick, Necessity thereof, 1017.
Menander, Heresiarch, his History and Errors, 132.
Merceur, Dutchy, in France, when, and by whom erected, 616.
 Mercury, in Metals, known under several Denominations, 398.
 — its Properties, 398, 399.
 — where found, how separated from the Ore or Earth, 398, 400.
Mercury, in Painting, how painted; 751.

Mercy, in Painting, how painted, 752.
 Merit, in Janfenism, in how many Parts it can be taken, 231.
 Merit, three Sorts thereof, *ibid.*
 Meritorious Action, in Janfenism, Conditions requisite to it, 231, 232.
 Mermaid, in Natural History, History thereof, 566.
Messalians, Hereticks, their History and Errors, 138.
 METALS, six or seven Sorts thereof, 390.
 — their Nature, how produced; Sentiments of *M. Tournefort*, *Dr. Woodward*, *Geoffroy*, and *l'Emery* thereupon, 390, 391.
 — Refutation of those Sentiments, by *De Coetlogon*, and his own Sentiment, 392.
 — that of *Boerhaave*, refuted by the same, 393, 394.
 Metals, Determination of their specifick Weight, 700.
 Metaphor, in Rhetorick, History, Rules and Examples thereof, 1013.
 Metaphysical Degrees, in Metaphysick, Doctrine thereof, 401, 402.
 METAPHYSICK, Definition and Division thereof, 400.
 Metaphysick Art, in Metaphysick; Definition thereof, 403.
 Metaphysick Truth, Definition thereof, 404.
 Metaphysick Goodness, Definition thereof, *ib.*
 Meteor, Definition, and Division thereof, 417.
 — igneous, or fiery; their Number and History, 418, 419.
 — aërial, or airy, their Number and History, 420, 421.
 Method of casting Cannons, in Gunnery, 100, 101.
 Method of dressing a Horse, for Hunting, in Horsemanship, 177, 178, 179.
 Method, in Logick, Definition and Doctrine thereof, 342, 343, 344.
 Method of helping a Woman in Labour, when the Child presents one or two Feet foremost, 460.
 — when he pushes out foremost the Neck of the Matrice, 462.
 — when he presents one Side of the Head, 763.
 — when his Body is stopped at the Passage by the Shoulders, *ibid.*
 — when he presents one or both Hands together with the Head, *ibid.*
 — when he presents one or both Hands alone, 464.
 — when he presents his Feet and Hands, *ibid.*
 — when he presents his Knees, *ibid.*
 — when he presents his Shoulders, Back, or Buttock, *ibid.*
 — when he presents the Belly, Breast, or Side, 465.
 — when there are several Children, who present themselves in the different Postures heretofore mentioned, *ibid.*
 — when the Navel-string comes foremost, 466.
 — when the After-birth presents itself foremost; or is entirely come out before the Child, *ibid.*
 — when a Delivery is attended with a great Loss of Blood, or with Convulsions, 467.
 METHUENISM, History thereof, 436, 437.
 Methodists, a Sect of Physicians, History thereof, 941.
Michaelmas-Term, Number of its Returns, 319.
Michel Angelo, a Painter, of the Roman School; his History and particular Talent, 767.
 — Remarks on his Works, 768.
Michel Angelo Caravaggio, a Painter, of the School of Lombardy, 779.
 — Remarks on his Works, *ibid.*
Michel Servetus, Heresiarch; his History and Errors, 158.
Michel Caxis, a Painter, of the Flemish School; his History and particular Talent, 780.
Michel Johnson, a Painter, of the Flemish School; his History and particular Talent, 784.
 Microscope, in Dioptricks, Definition and Division thereof, 652.
 — single, Description and Laws thereof, 652, 653.
 — Water's Description and Laws thereof, 654.
 MIDWIFERY, Treatise thereof, 438.
 Milling, or throwing Silk, in Weaving; Art thereof, 1204.
 MINERALS, *De Coetlogon's* System thereupon, 492, 493.
 Minerals, in Pharmacy, their Number, 807.

INDEX to the SECOND VOLUME.

- Innocence, in Painting; how painted, 752.
Institution of Heirs, in Law, Doctrine thereof, 289.
Instrumental Musick, Definition and Theory thereof, 531.
Instruments, in Musick, two Kinds thereof, *ibid.*
Interjection, in Grammar; Definition and History thereof, 73.
Interrogation, a Figure in Rhetorick, Definition and History thereof, 1008.
Invecked, Term of Heraldry, Signification thereof, 124.
Invention, in Law; Doctrine thereof, 286.
Invention, in Rhetorick; Definition thereof, 1007.
Inventory, in Law; Definition thereof, 290.
Invisibility of God, Doctrine and Proofs thereof, 20.
Joachim Santrat, a Painter, of the Flemish School; his History and particular Talent, 787.
John Brentius, a Confessionist; his Errors, 158.
John Angelick, a Painter, of the Roman School; his Character and particular Talent, 760.
John Francis Penni, a Painter, of the Roman School; his Character and particular Talent, 764.
John of Udine, a Painter, of the Roman School; his History and particular Talent, 767.
John Bellini, a Painter, of the Venetian School; his particular Talent, 770.
John Antony Rigillo, called *Pordenon*, a Painter, of the Venetian School; his History and particular Talent, 773.
John Vandyck, a Painter, of the Flemish School, his History and particular Talent, 779.
John Mahaffy, a Painter, of the Flemish School; his History and particular Talent, 780.
John Olbeir, a Painter, of the Flemish School; his History and particular Talent, *ibid.*
John Cornelius Vermeyen, a Painter, of the Flemish School; his History and particular Talent, *ibid.*
John Bol, a Painter, of the Flemish School; his History and particular Talent, 781, 782.
John Stradan, a Painter, of the Flemish School; his Character and particular Talent, 782.
John Dac, a Painter of the Flemish School; his particular Talent, *ibid.*
John Rotenmar, a Painter of the Flemish School; his particular Talent, *ibid.*
John Torontius, a Painter of the Flemish School; his History, and particular Talent, 785.
John Lanfranc, a Painter of the School of Lombardy; his Character, and particular Talent, 777. Remarks on his Works, 777, 778.
John Couffe, a Painter of the French School; his particular Talent, 788.
John Hyskins, an English Painter; his particular Talent, 788.
John Riley, an English Painter; his particular Talent, *ibid.*
Jouff, Dutchy, in France; when, and by whom erected, 616.
Iron, Figure in Rhetorick; Definition and Examples thereof, 1014.
Irregular, or anomalous Verbs, in Grammar; where the Irregularity lies in English, 71.
Isaac Fuller, an English Painter; his particular Talent, 797.
Illumant, Term of Heraldry; Signification thereof, 124.
Iliac, in Law, Distinction thereof, 313.
Iliac, general; Definition thereof, *ibid.*
— special; Definition thereof, *ibid.*
Italian Language, in Grammar; History thereof, 80.
Jug, in Law, History thereof, 264, 265.
Judgment, in Law, Definition and History thereof, 314.
Juce, in Pharmacy; how extracted, 824.
— black, of Liquorice; Preparation thereof, *ibid.*
— white of Liquorice; Preparation thereof, *ibid.*
Julep, in Pharmacy; Definition thereof, 813.
— pectoral, Preparation, Doses, and Virtues thereof, *ibid.*
— hyssopick; Preparation, Doses, and Virtues thereof, 813, 814.
— storid hyssopick; Preparation, Doses, and Virtues thereof, 814.
— camphorate hyssopick; Preparation, Doses and Virtues thereof, *ibid.*
Julio Romano, a Painter of the Roman School; his History, and particular Talent, 764.
Julio Lucina, called *Pordenon the Younger*, a Painter of the Venetian School; his History, and particular Talent, 774.
July, Month, in Painting, how painted, 752.
Jumelle, a double Cannon, in Gunnery; Invention, and Description thereof, 85.
June, a Month, in Painting; how painted, 752.
Jurisprudence, in Law; Definition thereof, 282.
Jurors, in Law, how impanelled, both in civil and criminal Cases; their History, 313.
Justice, and Law; Definition and History thereof, 282.
Justification, in Jansenism; Definition thereof, 229.
Justification, first active; Definition thereof, *ib.*
— first passive; Definition thereof, *ib.*
— second active; Definition thereof, *ib.*
— second passive; Definition thereof, *ib.*
Justification of the Impious; how effected, *ib.*
Justification; Disposition required to it, 229, 230.

K.

K, the tenth Letter of the Alphabet, and a double Consonant, in Grammar, 61.
— borrowed from the Greek *Kappa*; a superfluous Letter, according to *Prescian*, unknown to the ancient Romans; Remarks of *M. Beger* thereupon, *ibid.*
K, has various Significations; never used by the French; Remarks of *Abblancourt* thereupon, *ibid.* Much used in the English, *ibid.*
Its Signification among the numeral Characters of the Antients, 64.
Kaligasthes, used in Glass-making, 5.
KLEBER, Name of a Sect among the Persians; History thereof, 269.
Keel of a Ship, in naval Architecture; how placed well on the Stocks, 582.
King's Evil, a Disease, in Physick; Causes and Cure thereof, 930. History of couching for it, *ibid.*
Keys, in Musick; Invention, and Doctrine thereof, 512.
Keys, their Distinction, into sharp and flat; Remarks of *Mr. Malcolm* thereupon, 513.

L.

L, the eleventh Letter of the Alphabet, and a Semi-vowel; Remarks of *Pafsat* thereupon, 62. Its Signification among the numeral Characters of the Antients, 64.
Label, an honourable Difference in Heraldry; Blazon thereof, 115.
Lacedemonians, their Hieroglyphicks; Explanation thereof, 167.
Laconic Style, in Rhetorick; Definition, Rules and Examples thereof, 1011.
La Ferte Sennterre, Dutchy, in France; when and by whom erected, 617.
La Force, Dutchy in France; when, and by whom erected, 616.
Lambrequin, Term of Heraldry; Signification thereof, 124.
La Meilleraye, Dutchy in France; when, and by whom erected, 617.
Language, in Grammar; Definition thereof, 76.
Languages, their first Principles, according to *Father Bussier*; their Use, as defined by *Targuias*; their Diversity whence it arose, *ib.*
Antiquity and Priority between them, much controverted, 77. Their Division, *ibid.*
Langued, Term of Heraldry; Signification thereof, 124.
LAPIDARY, Art thereof, 270, 271.
Lapidaries, in Europe, their Manner of examining their rough Diamonds, 271.
Lares, in Mythology; Definition thereof, 548.
Lares, distinguished by *Plutarch*, into Good and Evil, *ibid.*
Lares, Domestick, what, according to *Aquilius*, *ibid.*
— publick; their Office, *ibid.*
— private; their Office, *ibid.*
— of Cities; their Office, *ibid.*
Lares, their Origin; when first worshipped, and on what Occasion, according to *Tertullian*; Victims offered to them, *ibid.*
Largo, Term of Musick; Signification thereof, 539.
Latin Language; History thereof, 78, 79.
La Trappe, in Orders; a Reformation of the Order of *Citeaux*; History thereof, 667, 668.
Laughter, in Painting; how painted, 752.
Law, Definition and Etymology thereof, 275.
— called by five different Names, *ibid.*
— either natural or positive, *ibid.*
Law, positive, Definition thereof; either divine or human, *ibid.*
Law, divine; Definition thereof, either ancient or new, *ibid.*
Law, ancient or old; Definition thereof, *ib.*
— its Precepts, 278.
— new; Definition thereof, 275.
— its Precepts, 279.
Law, human; either ecclesiastical or civil, 275.
Law, ecclesiastical; Definition thereof, *ibid.*
— civil; Definition thereof, *ibid.*
Law, Matter subject to it, 275, 276.
Law, eternal; History thereof, 276.
— natural History thereof, *ibid.*
— Precepts thereof, 277.
Law of Nations, Definition thereof; and Explanation of the Definition, *ibid.*
— Precepts thereof, 277, 278.
Law, falsidian; Doctrine thereof, 290.
Laws, three of the local Motion, established by the Cartesians; Doctrine thereof, 335.
Laws of the Foci of Glasses, in Opticks; and the Method of finding them, 647, 648.
Law, in Painting; how painted, 752.
Lead, in Metals; Definition thereof, 398.
— where, and how found, how melted; Reflections of the Naturalists thereupon, *ib.*
Leaf, in natural History; Definition and Description thereof, 569.
League, famous of Smalcalde, in Lutheranism; History thereof, 353.
Leaves, how considered by Botanists, 569.
Leaves, annual; Definition thereof, *ibid.*
— crenated; Definition thereof, *ibid.*
— dissimilar; Definition thereof, *ibid.*
— procumbent; Definition thereof, *ibid.*
— segment; Definition thereof, *ibid.*
— vernal; Definition thereof, *ibid.*
Ledger Lines, in Musick; what, 533.
Lediguieres, Dutchy in France; when, and by whom erected, 616.
Legacy, in Law; Definition and Doctrine thereof, 290.
Lemures, in Mythology; their History, and Remarks thereupon, 549.
Lens in Dioptricks; various Figures thereof, 645.
Lenses, in Dioptricks; distinguished into Ground and Blown, 646.
— convex; Laws of Refraction with respect to them, *ibid.*
— concave; Laws thereof, 647.
Leonardo da Vinci, a Painter of the Roman School; his History, and particular Talent, 761. Remarks on his Works, 762.
Leonian Society, in Law; what, 293.
Leprosy, a cutaneous Distemper, in Physick; History, Causes, Symptoms, and Cure thereof, 938, 939.
Letters of the Alphabet; their History, 59, 60.
Letters Patent, in Chancery; History thereof, 306.
Lever, in Mechanicks, Definition and Description thereof, 376. Three Things to be considered in a Lever, *ibid.*
Levers, three Kinds thereof, *ibid.*
Levers of the first Kind; Theory thereof, *ibid.*
— of the second Kind; Theory thereof, *ibid.*
— of the third Kind; Theory thereof, *ib.*
Leviner, or Leymer, a hunting Dog; its Qualities, 188.
Liancourt, Dutchy, in France; when, and by whom erected, 617.
Liberty, in Metaphysick, Definition thereof; two Sorts of Liberty, 415.
Liberty from Coaction; Definition thereof, and Remarks thereupon, *ibid.*
Liberty from Necessity; Definition thereof, and Remarks thereupon, *ibid.*
Lientry, a Disease, in Physick; Causes and Cure thereof, 934.
Light, in Opticks; Nature thereof, as explained by *Aristotle*, the *Cartesians*, and *F. Malebranche*, 625, 626.
— by the *Newtonians*, 626.
Light, Reflexion and Refraction thereof, 627, 628.
Light, but three Affections thereof, 629.
Line of equal Parts, or Line of Lines, marked on the Sector, or Compaſs of Proportion, how divided and subdivided, on which Side of the Compaſs found, how numbered, 594.
Line of Cords; how divided and numbered, *ib.*
Line of Tangents; how divided and numbered, *ibid.*
Line of Secants; how divided and numbered, *ibid.*
Line of Polygons; how divided and numbered, *ibid.*
Line, in Navigation, Sounding; two Sorts thereof; its Description and Use, 587.
Line of the Log; Description and Use thereof, 594.
Line for Linen Cloth, in Weaving; how prepared, 1207.
Lines, in Perspective; different Sorts thereof, 802.
Linen Cloth, in Weaving; different Sorts thereof, 1207.

Linen Manufacture, in Weaving, History thereof, *ibid.*
 Lion rampant, Hieroglyphick; Explication thereof, 162.
 Lions set to the Chariot of *Cybel*, Hieroglyphick; Explication thereof, *ibid.*
 Lions, how borne in Heraldry, 113.
 Lion's Skin, Hieroglyphick; Explication thereof, 162.
 Lions, Hieroglyphick; Explication thereof, *ibid.*
Lippo of Florence, a Painter of the Roman School; his History, and particular Talent, 760.
 Liquids, in Grammar; what, 58.
 Local Motion, in Mechanicks; Affections, Causes, &c. thereof, 381.
 Location Conduccion, in Law; Definition thereof, 293.
 Location, tacit, in Law, Definition thereof, *ib.*
 Log, in Navigation; Description and Use thereof, 594.
 Logic, Definition and Division thereof, 320.
 Longitude, in Navigation, the Invention thereof of a true Powder of Projection; of what Utility, if it was found, 600.
 — various Methods of finding it at present, 600, 601.
 Looch, in Pharmacy; Definition thereof, 837.
 — pectoral; Preparation and Virtues thereof, *ibid.*
 — to stop Vomiting; Preparation and Doses thereof, *ibid.*
 — of red Cabbages; Preparation and Virtues thereof, *ibid.*
 — of Squill; Preparation and Virtues thereof, *ibid.*
 — of Poppies, Preparation and Virtues thereof, *ibid.*
 — of Garlick; Preparation and Virtues thereof, *ibid.*
 — of Jar-Raisins; Preparation and Virtues thereof, *ibid.*
 — of Althæa; Preparation and Virtues thereof, 837, 838.
 Lotion, in Pharmacy; Definition and Use thereof, 818.
 Lotion to kill Lice in the Head; Preparation thereof, *ibid.*
 Lotion to render red Hairs black; Preparation thereof, *ibid.*
Loudun, Dutchy, in France; when, and by whom erected, 616.
Louis XIV. King of France, in Painting; how painted, 751.
 Lozange, an honourable Ordinary, in Heraldry; Blazon thereof, 124.
 Lozangy, Term of Heraldry; Signification thereof, *ibid.*
Luca Signorelli, a Painter, of the Roman School; his History and particular Talent, 761.
Lucas of Leyden, a Painter, of the Flemish School; his Character and particular Talent, 780.
Luther, Martin, Author of Lutheranism, his Birth and Education; begins to preach his new Doctrine, on what Occasion, 346.
 — appears before the Pope's Legate, 346, 347.
 — forty one of his Propositions condemned by the Pope, 347.
 — appears at the Diet of Worms, and is banished by the Emperor, 348.
 — is condemned by the Sorbonne, to whom he had appealed, and submitted his Writings, 349.
 — his Treatment of *Henry VIII.* King of England, *ibid.*
 — marries a Nun, 350.
 — writes several Things against the Emperor and Bishops, 353.
 — died of an Indigestion at *Isbel*, the Place of his Birth; his Character, 357.
 LUTHERANISM, History thereof, 347, 348.
 Lyre, Hieroglyphick; Explication thereof, 168.

M.

M, A liquid Consonant, and the twelfth Letter of the Alphabet; how pronounced, 62.
 — Remarks of Quintillian thereupon, *ibid.*
 — Its Signification among the numeral Characters of the Antients, 64.
 Macaronick Poetry, History thereof, 978.
Macedonius, Heresiarch, his History and Errors, 138.
 Machines, in Mechanicks; two Sorts thereof, 375.
 — simple, six Sorts thereof, *ibid.*
 — compound, their Number almost infinite, *ibid.*

MAGICK, Treatise thereof, 363, 364.
 Magna Charta, in Law, the Basis of the English Liberties; History thereof, 306.
 MAGNET, Treatise thereof, 366, 367.
Mahomet, the Impostor; his History, 371.
Mahomet, in Painting; how painted, 757.
 MAHOMETANISM, History thereof, 371, 372, 373.
Mahometans, their Theology, 372.
Maille Luynes, Dutchy, in France; when, and by whom erected, 616.
 Man of War, in Naval Architecture, its several Dimensions, 570, 579.
 Mandate, in Law, Doctrine thereof, 294.
 Manganese, a Kind of Pseudo-Load-stone, which enters the Composition of Glafs; where found, 2.
 Mania, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 919.
Manicheans, Hereticks; their History and Errors, 136, 137.
 Manner of Things, or Modes in Logick; Definition and Doctrine thereof, 322, 323.
 Manner of treating a Child, newly born, in Midwifry, 479.
 Manner of hindering Children from being squint-ey'd, awry, crooked, and lame, in Midwifry, 491.
 Manners, in Poetry; Definition and Rules thereof, 968, 969.
 Mantle, in Heraldry, Blazon thereof, 124.
 Manumission, by Testament, in Law; three solemn Manners of Manumission, 283.
 Marcasite, in Natural History, History thereof, 753.
Marcian, Heresiarch, his History and Errors, 134.
 Mares, in Horsemanship; the fittest to breed out of, 172.
 — how kept during the Time of their being with Foal, 173.
Mark, Heretick; his History and Errors, 135.
Mariotte, his Experiments on Hydraulicks, 204.
 Marriage, Maritajum, in Law; Signification thereof, 285.
Martin de Vos, a Painter, of the Flemish School; his particular Talent, 782.
 Martlets, honourable Ordinary, in Heraldry; Blazon thereof, 124.
 Mascle, honourable Ordinary, in Heraldry; Blazon thereof, *ibid.*
 Massoned, Term of Heraldry; Signification thereof, *ibid.*
 Mast, in Naval Architecture; Proportions thereof, 570.
 Masts, their Number in a Ship, *ibid.*
 — Main, its Position and Rigging, *ibid.*
 — Fore, its Position and Rigging, *ibid.*
 — Mizen, its Position and Rigging, *ibid.*
 — Bowsprit, its Position and Rigging, *ib.*
 Master of Musick, his Skill, in what it consists, 529.
Master Raux, a Painter, of the Roman School, his History, and particular Talent, 782.
 MATHEMATICKS, Definition and Division thereof, 374.
 Mathematicks, speculative, Definition thereof, *ibid.*
 — practical, pure, mixed; Definition thereof, *ibid.*
 — their Origin, *ibid.*
 Matrimony, in Sacraments; Treatise thereof, 1027, 1028, 1029.
Matthew and Paul Bril, Painters, of the Flemish School, their particular Talent, 782.
 MECHANICKS, Treatise thereof, 375, 376.
 Medicines, in Physick, Definition and Division thereof, 915.
 — their Manner of operating, mechanically explain'd, 915, 916.
 — refuted by *De Coetlogon*, 916.
Melpomene, in Painting, how painted, 751.
 Melting Pots to contain the Materials for Looking-Glass Plates; their Bigness and Use, 3.
 Membred, Term of Heraldry; Signification thereof, 124.
 Memorial, presented to Don Pedro, Prince of Portugal, by one of his Ministers, on the insulting Conduct of Spain, 1156, 1157.
 Memory, in Rhetorick, Necessity thereof, 1017.
Menander, Heresiarch, his History and Errors, 132.
Merceur, Dutchy, in France, when, and by whom erected, 616.
 Mercury, in Metals, known under several Denominations, 398.
 — its Properties, 398, 399.
 — where found, how separated from the Ore or Earth, 398, 400.
Mercury, in Painting, how painted; 751.

Mercy, in Painting, how painted, 752.
 Merit, in Janfenism, in how many Parts it can be taken, 231.
 Merit, three Sorts thereof, *ibid.*
 Meritorious Action, in Janfenism, Conditions requisite to it, 231, 232.
 Mermaid, in Natural History, History thereof, 566.
Messians, Hereticks, their History and Errors, 138.
 METALS, six or seven Sorts thereof, 390.
 — their Nature, how produced; Sentiments of *M. Tournesfort*, *Dr. Woodward*, *Geofrey*, and *l'Emery* thereupon, 390, 391.
 — Refutation of those Sentiments, by *De Coetlogon*, and his own Sentiment, 392.
 — that of *Bourhaue*, refuted by the same, 393, 394.
 Metals, Determination of their specifick Weight, 700.
 Metaphor, in Rhetorick, History, Rules and Examples thereof, 1013.
 Metaphysical Degrees, in Metaphysick, Doctrine thereof, 401, 402.
 METAPHYSICK, Definition and Division thereof, 400.
 Metaphysick Art, in Metaphysick; Definition thereof, 403.
 Metaphysick Truth, Definition thereof, 404.
 Metaphysick Goodness, Definition thereof, *ib.*
 Meteor, Definition, and Division thereof, 417.
 — igneous, or fiery; their Number and History, 418, 419.
 — aerial, or airy, their Number and History, 420, 421.
 Method of casting Cannons, in Gunnery, 100, 101.
 Method of dressing a Horse, for Hunting, in Horsemanship, 177, 178, 179.
 Method, in Logick, Definition and Doctrine thereof, 342, 343, 344.
 Method of helping a Woman in Labour, when the Child presents one or two Feet foremost, 460.
 — when he pushes out foremost the Neck of the Matrice, 462.
 — when he presents one Side of the Head, 763.
 — when his Body is stopped at the Passage by the Shoulders, *ibid.*
 — when he presents one or both Hands together with the Head, *ibid.*
 — when he presents one or both Hands alone, 464.
 — when he presents his Feet and Hands, *ibid.*
 — when he presents his Knees, *ibid.*
 — when he presents his Shoulders, Back, or Buttock, *ibid.*
 — when he presents the Belly, Breast, or Side, 465.
 — when there are several Children, who present themselves in the different Postures heretofore mentioned, *ibid.*
 — when the Navel-string comes foremost, 466.
 — when the After-birth presents itself foremost; or is entirely come out before the Child, *ibid.*
 — when a Delivery is attended with a great Loss of Blood, or with Convulsions, 467.
 METHODISM, History thereof, 436, 437.
Methodists, a Sect of Physicians, History thereof, 941.
Michaelmas-Term, Number of its Returns, 319.
Michel Angelo, a Painter, of the Roman School; his History and particular Talent, 767.
 — Remarks on his Works, 768.
Michel Angelo Caravaggio, a Painter, of the School of Lombardy, 779.
 — Remarks on his Works, *ibid.*
Michel Servetus, Heresiarch; his History and Errors, 158.
Michel Cavis, a Painter, of the Flemish School; his History and particular Talent, 780.
Michel Johnson, a Painter, of the Flemish School; his History and particular Talent, 781.
 Microscope, in Dioptricks, Definition and Division thereof, 652.
 — single, Description and Laws thereof, 652, 653.
 — Water's Description and Laws thereof, 654.
 MIDWIFRY, Treatise thereof, 438.
 Milling, or throwing Silk, in Weaving; Art thereof, 1204.
 MINERALS, *De Coetlogon's* System thereupon, 492, 493.
 Minerals, in Pharmacy, their Number, 807.

I N D E X to the S E C O N D V O L U M E.

- Mineral-Springs, in England, History thereof, 502, 503.
 — in France, History thereof, 503, 504.
 MINERAL-WATERS, how produced, 500.
 — different Sentiments thereupon, 501.
 — Method of discovering their Qualities, 502.
 Minos, in Painting, how painted, 751.
 Mirrours, in Catoptricks, Doctrine thereof, on what founded, 638.
 Mirrours, Division thereof, *ibid.*
 Mirrours, plane, Description and Laws thereof, 638, 639.
 — convex, Description and Laws thereof, 639, 640.
 — concave, Description and Laws thereof, 640.
 — burning, History and Laws thereof, 641.
 — cylindrical, conical, parabolical; Description and Laws thereof, 642.
 Mission of the divine Persons, in Trinity; Proofs thereof, 1179, 1180.
 Mitre, in Heraldry; different Manner of placing it over the Escutcheon, 116.
 Mixt Obligation, in Law; History thereof, 291.
 Model, first of a Ship, in Naval Architecture; Explication thereof, 580.
 — second, Explication thereof, *ibid.*
 Modes, in Musick; Definition and Division thereof, 516.
 Modes, antient, Division thereof, *ibid.*
 — Dorick, History thereof, *ibid.*
 — Phrygian, History thereof, *ibid.*
 — Mynolodian, History thereof, *ibid.*
 — Continuo, History thereof, *ibid.*
 — Common, History thereof, *ibid.*
 — Misto, or Mixto, History thereof, 507.
 Modes, Rules thereof, *ibid.*
 Molossus, the Foot of a Verse, in Poetry, Rules thereof, 961.
 Momus, in Painting; how painted, 751.
 Monarchy, in Government, Origin thereof, among the Jews, 41.
 Monarchies, antient, their Decadence, 42.
 — modern, their Distinction, *ibid.*
 — the most absolute and despotick in the World, 42, 43.
 Monarchies, Persian; History thereof, 43, 44.
 — French, History thereof, 44, 45, 46.
 Monarchicks, Hereticks; their History and Errors, 135.
 Monochord, Instrument of Musick; Description and Use thereof, 539.
 Monometer, in Pneumatics, Description and Use thereof, 953.
 Monstrelites, Hereticks, their History and Errors, 554, 555.
 Monsters, in Natural History, Definition and History thereof, 554.
 Montanus, Heresiarch; his History and Errors, 134.
 Montbazou, Dutchy, in France, when, and by whom erected, *ibid.*
 Montmorency, Dutchy, in France; when, and by whom erected, 617.
 Montmorency Luxembourg, Dutchy, in France; when and by whom erected, 616.
 Montpensier, Dutchy, in France, when, and by whom erected, 616.
 Mooted, Term of Heraldry; Signification thereof, 124.
 Morgomatick, a Kind of Marriage, in Germany; History thereof, 284.
 Mortar, in Gunnery, Definition and Description thereof, 87.
 Mortars, two Kinds thereof, *ibid.*
 Mortars for throwing Stones; Proportions thereof, *ibid.*
 Mortars for throwing Bombs; Preparations thereof, *ibid.*
 Mortars, common; Use thereof, 90.
 Mortars, how mounted on their Carriage, *ibid.*
 Mortars, called, *Obus*, or *Obits*, History thereof, 92.
 Mortemar, Dutchy, in France; when, and by whom erected, 617.
 Motion, in Mechanics, Doctrine thereof, 381, 382, 383.
 Motion, perpetual, Means used to find it, 380.
 — Local, Definition and Doctrine thereof, 381.
 — Tonick, Definition thereof, *ibid.*
 Motion, its principal Affections, 382.
 — Quantity, Definition thereof, *ibid.*
 — Determination, Definition thereof, 382, 383.
 — Reflexion, Definition and Theory thereof, 383, 384.
 — true and proper Cause; Theory thereof, 384.
 Motion, translated, Cause and Laws thereof, 385.
 Motions of the intellective Appetite in God, what, 30, 31.
 Motions of the Voice, in Musick; Difference thereof according to *Aristoxenes*, 530.
 Movimento, Term of Musick; Signification and Use thereof, 540.
 Mucilage, in Pharmacy; Definition thereof, 818.
 — common emollient; Preparation and Virtues thereof, *ibid.*
 — of Gum Traganth; Preparation and Virtues thereof, *ibid.*
 — to stop an Hemorrhage; Preparation and Virtues thereof, 819.
 — of a Ram's Skin; Preparation and Virtues thereof, *ibid.*
 Musti, Chief or Patriarch of the Mahometan Religion; his Dignity and Power, 372.
 Mule, Hieroglyphick; Explication thereof, 163.
 Mule, in Natural History; how propagated, 554.
 Mullet, an honourable Ordinary, in Heraldry; Blazon thereof, 124.
 Munitions for a Siege, in Gunnery, 97.
 Musket, common, in Gunnery; Description and Caliber thereof, 105.
 MUSICK, Definition and Division thereof, 507.
 — speculative; Definition thereof, *ibid.*
 — practical; Definition thereof, *ibid.*
 Musick, how defined by *Hermes Trismegistus*, *Aristides*, *Quintilianus*, and *Bacchius*, 508.
 — divided into natural and artificial, *ibid.*
 Musick, vocal; Definition and Rules thereof, 529, 530.
 — instrumental; Definition and History thereof, 531.
 Musquetoon, in Gunnery; Proportions thereof, 105.
 Mutations, in Musick; Etymology and Rules thereof, 519.
 Mutuum, in Law; Definition and Doctrine thereof, 291, 292.
 Myopes, in Opticks; what, 635.
 MYTHOLOGY, Treatise thereof, 547.
- ## N.
- N**, A liquid Consonant, and the thirteenth Letter of the Alphabet; History thereof, and Remarks of the Abbot thereupon, 62.
 — Its Signification among the numeral Characters of the Antients, 64.
 Naked Figures, in Painting; when to be used, 747.
 Naiades, in Painting; how painted, 752.
 Names, essential, in God; their Signification, 1178.
 — to be appropriated to the Persons, 1179.
 Names of the first Person in the Trinity; Number thereof, 1181.
 — of the second Person; their Number, 1182.
 — of the third Person; their Number, 1184.
 Naphta, in Minerals; Description thereof, where found, different Sorts thereof, its Virtues, how called by the Turks, 497.
 Nativities of Christ, Number and Proofs thereof, 251, 252.
 Natural Law, Definition thereof, some of its Precepts more universally known than other, 276.
 — immutable with Regard to its first Principles, *ibid.*
 — admits of no Dispensation, nor Interpretation, by Epicky, 277.
 Natural Habits of the human Soul; Doctrine thereof, 416, 417.
 NATURAL HISTORY, Treatise thereof, 554.
 Natural Magick, Definition thereof, 366.
 — that of the Chaldeans, its History, *ibid.*
 Natural Philosophy, System thereof, 905.
 Natures, two, in Christ; Proofs thereof in Incarnation, 243, 244.
 NAVAL ARCHITECTURE, Treatise thereof, 569.
 Navel, Hieroglyphick, Explication thereof, 161.
 NAVIGATION, Definition and Division thereof, 585.
 — common, Definition thereof, *ibid.*
 — proper, Definition thereof, *ibid.*
 Nazareans, a Sect among the Jews, their History, 266.
 Nebuly, Term of Heraldry; Signification thereof, 125.
 Necklace, Hieroglyphick, Explication thereof, 167.
- Needle, in Needle-making; several Sorts thereof, 613.
 Needles, in Commerce, 614.
 Needles, magnetical; Division and Mechanism thereof, *ibid.*
 NEEDLE-MAKING, Art thereof, 613.
 Nemours, Dutchy, in France; when, and by whom erected, 615.
 Nephretick Cholick, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 955.
 Neptune, in Painting; how painted, 751.
 Netcher, Gaspar, a Painter, of the Flemish School; his History and particular Talent, 788.
 — Remarks on his Works, *ibid.*
 Nevvers, Dutchy, in France; when, and by whom erected, 616.
 Newtonian Philosophy, System thereof, 902, 903.
 Nicolas Poussin, a Painter, of the French School, called the *Raphael of France*; his History and particular Talent, 789.
 — Remarks on his Works, 790.
 Nicolas Mignard, a Painter, of the French School; his History and particular Talent, 792.
 Nicolas Loir, a Painter, of the French School; his History and particular Talent, 793.
 Nicolaites, Hereticks; their History and Errors, 152.
 Nightingale, Hieroglyphick, Explication thereof, 165.
 Noailles, Dutchy, in France; when, and by whom erected, 617.
 Nobility, Definition, and Origin thereof, according to De Coetlogon, 614.
 — the infamous Commerce of selling it, 615.
 Nominative Case, in Grammar; Definition and Rules thereof, 69.
 Nonfuit, in Law; Doctrine thereof, 314.
 Nonupla, in Musick; Definition thereof, 540.
 Nonupla di Semi-minime; how marked, and its Value, *ibid.*
 Nonupla di Crome; how marked, and its Value, *ibid.*
 Nonupla di Semi-Crome; how marked, and its Value, *ibid.*
 Norbertine Nuns, a religious Congregation; History thereof, 675.
 Norway, King of Arms, in England, 130.
 Notaricon, in Judaism; two principal Kinds thereof, 268.
 Notes of the System of Guido Aretin, in Musick; their Use, 514.
 Notes of *John des Murs*; Utility, Form and Value thereof, *ibid.*
 Notes and Characters, in Musick; History thereof, 533.
 Novatian, Heresiarch; his History and Errors, 134.
 Novatians, Hereticks; their History and Errors, *ibid.*
 Noun, in Grammar; Definition and Division thereof, 67.
 Noun Substantive; why thus called, *ibid.*
 — Adjective; why thus called, *ibid.*
 Nouns proper, Definition thereof, *ibid.*
 — appellative, Definition thereof, *ibid.*
 — heterogenous, Definition thereof, *ibid.*
 Nouns, Heteroclitie, Division thereof into, — Aptote, Definition thereof, *ibid.*
 — Diptote, Definition thereof, *ibid.*
 — Triptote, Definition thereof, *ibid.*
 — Pentaptote, Definition thereof, *ibid.*
 Nouns, Inflection thereof, how called, 68.
 Numa Pompilius, in Painting; how painted, 751.
 Numbers, in Rhetorick; Definition and Necessity thereof, 1009.
 Nuptials, or Marriage, in Law; Definition and Conditions thereof, 1175.
 Nurse, for new-born Children; how to be chosen, 481, 481.
- ## O.
- O**, The fourteenth Letter of the Alphabet, and the fourth Vowel, 62.
 — frequently confounded with the *u*, by the Latins; two *o* among the Greeks, *ibid.*
 — Its Signification among the numeral Characters of the Antients, 64.
 O, majuscule, in Musick; Signification thereof, 540.
 Obligation, in Law; three Kinds thereof, 291.
 Obligations, natural; Definition and Conditions thereof, *ibid.*
 — civil, Definition and Conditions thereof, *ibid.*
 — mixt, Definition and Conditions thereof, *ibid.*
 Obligations, whence they arise, *ibid.*

I N D E X to the SECOND VOLUME.

- Obligations, in what Manner contracted, *ibid.*
 — verbal, Conditions thereof, 292.
 — arising from a Quasi-contract, 294.
 — arising from Quasi-crimes, 295.
Obligato, in Musick; Signification thereof, 540.
Obliquo, in Musick; Signification thereof, *ibid.*
 Observation, in Rhetorick; Rules and Examples thereof, *ibid.*
 Octave, in Musick; Definition and History thereof, 540.
October, a Month, in Painting; how painted, 752.
 Ode, in Poetry; Etymology and Definition thereof, 973.
 Ode of the Antients; Remarks of Vossius thereupon, *ibid.*
 — their true Signification then, *ibid.*
 — Rules thereof, 974.
 Ode, Pindarick; History and Rules thereof, *ibid.*
 Oil, in Pharmacy; Definition and History thereof, 867.
 Oil of Olive; Preparation and Virtues thereof, *ibid.*
 Oil, Amphacine; a chimerical one, *ibid.*
 Oil of sweet Almonds; Preparation and Virtues thereof, 867, 868.
 — of bitter Almonds; Preparation and Virtues thereof, 868.
 — of Eggs; Preparation and Virtues thereof, *ibid.*
 — of Roses; Preparation and Virtues thereof, *ibid.*
 — of Iris, or *Irinum*; Preparation and Virtues thereof, *ibid.*
 — of St. John-wort composed; Preparation and Virtues thereof, *ibid.*
 — of Saffron; Preparation and Virtues thereof, 869.
 — of Euphorbium; Preparation and Virtues thereof, *ibid.*
 — of Tobacco; Preparation and Virtues thereof, *ibid.*
 — of Mastich; Preparation and Virtues thereof, *ibid.*
Oleum nardinum, in Pharmacy; Preparation and Virtues thereof, 869.
 — *Acantharum*; Preparation and Virtues thereof, *ibid.*
 — *Balsami*; Preparation and Virtues thereof, *ibid.*
 — *Curmativum reformatum*; Preparation and Virtues thereof, *ibid.*
 — *Catellorum*; Preparation and Virtues thereof, 871.
 — *Contra Sarditatem*; Preparation and Virtues thereof, *ibid.*
 — *de piperibus reformatum*; Preparation and Virtues thereof, 869.
 — *Formicarum*; Preparation and Virtues thereof, 871.
 — *Lumbricorum*; Preparation and Virtues thereof, 869.
 — *Majoranae*; Preparation and Virtues thereof, *ibid.*
 — *Mirabile*; Preparation and Virtues thereof, 871.
 — *Mofebatum*; Preparation and Virtues thereof, 869.
 — *Nephreticum*; Preparation and Virtues thereof, *ibid.*
 — *Pepeum*; Preparation and Virtues thereof, *ibid.*
 — *Ranarum*; Preparation and Virtues thereof, 871.
 — *Resolutivum*; Preparation and Virtues thereof, 869.
 — *Scarabaeorum*; Preparation and Virtues thereof, *ibid.*
 — *Sicyonium compositum*; Preparation and Virtues thereof, *ibid.*
 Ombre, French Term of Heraldry; Signification thereof, 124.
 Onde, French Term of Heraldry; Signification thereof, *ibid.*
 Ongle, French Term of Heraldry; Signification thereof, *ibid.*
 Onion, Hieroglyphick; Explication thereof, 169.
 Opera, in Musick; Dissertation thereupon, 545.
Ophter, Hereticks; their History and Errors, 133.
Opiata Salamonis, in Pharmacy; Preparation and Virtues thereof, 853.
Opiata Kermis; Preparation and Virtues thereof, 854.
 Opiate, in Pharmacy; Definition and Preparation thereof, 857.
 Opiate, Antinephretick; Preparation and Virtues thereof, 854.
 Opposition, in Metaphysick; four Kinds thereof, 405.
 Optative, the third Mood in the Conjugation of Verbs, in Grammar, 71.
 Ophthalmia, a Disease of the Eyes; Cause, Symptoms, and Cure thereof, 940.
Opticks, Treatise thereof, 624.
 Or, Metal, in Heraldry; how painted and engraved, 108.
 Oracles, in Magick, their History, Sentiment of Bayle, Plutarch, Fontenelle, Van Dale, Balthus, Bacchet, Eusebius, and Oenomaus hereupon, 365.
 Oratorical Period, in Rhetorick; Rules thereof, 1009.
 Oratorio, in Musick; Definition and History 537.
 ORDERS, Definition and Division thereof, 664.
 Orders, religious; Origin and Progresses thereof, 664.
 — military; Origin thereof, 678.
 Order of St. John of Jerusalem, or of Malta; History thereof, 678, 679.
 — Abridgment of its Statutes and Canons, 679, 680.
 — Ceremonies observ'd in giving the Habit of the Order, 680, 681.
 — those at the Election of the Grand Master, 681, 682.
 — chronological Succession of the grand Masters, 682, 683.
 Order of the Templars; History thereof, 683.
 — Abridgment of the Rules of the Order, 684.
 — chronological Succession of the grand Masters, 688.
 — their unhappy Catastrophe, *ibid.*
 Order of St. Lazarus of Jerusalem; History thereof, 688, 689.
 — chronological Succession of the Grand Masters, 689.
 Order teutonick; History thereof, 689, 690.
 — their antient Observance, 690, 691.
 — Election of the grand Master, 691.
 — chronological Succession of the grand Masters, 691, 692.
 Order of Calatrava, in Spain; History thereof, 692.
 — Abridgment of their antient Rules, *ibid.*
 — chronological Succession of the grand Masters, 693.
 Order of the Golden Angel; History thereof, 693, 694.
 — Ceremonies used at the Reception of the Knights, 695.
 — critical Remarks on this Order, 695, 696.
 Order of the St. Sepulchre, History thereof, 696.
 — their Rules given by Charlemagne, *ibid.*
 — critical Remarks thereupon, 697.
 Order of the Croisade; History thereof, 698.
 Order of the Star, in France; History thereof, 701.
 Order of St. Michael, in France; History thereof, 701.
 Order of the Holy Ghost, in France, History thereof, 702, 703.
 — Vows made by the Chief of the Order; and by the Knights, 703.
 — chronological Succession of the grand Masters, 704, 705, 706, 707.
 Order of St. Lazare, and of N. D. de Mount Carmel, in France, History thereof, 707, 708.
 — Ceremonies observed at the Reception of the Knights, 709.
 — chronological Succession of the grand Masters, *ibid.*
 Order of St. Louis, in France; History thereof, 709, 710.
 Order of the Bath, in England; History thereof, 711.
 — Ceremonies used antiently at the Reception of a Knight, 711, 712.
 — Chronology of the grand Masters, 713.
 Order of the Garter, in England; History thereof, 713, 714.
 — Rules of the Order at its first Institution, 714.
 — modern Rules, 715.
 — chronological Succession of the grand Masters, and of the Knights Companions of the Order to this Day, 716, 717, 718.
 Order of the Thistle, and of the Rue, in Scotland; History thereof, 720, 721.
 — antient Rules of the Order, 721.
 — chronological Succession of the grand Masters, 721, 722.
 Order of St. James, or of St. Jago de la Spada, in Spain; History thereof, 722, 723.
 — Rules of the Order, 722.
 Order of Alcantara, in Spain; History thereof, 723.
 Order of the Golden Fleece, in Spain; History thereof, 723, 724, 725.
 — Privileges and Ceremonies of the Order, 724.
 — chronological Succession of the Grand Masters, and Knights, 724, 725, 726.
 Order of Avis, in Portugal; History thereof, 728, 729.
 Order of St. James, in Portugal; History thereof, 729.
 Order of Christ, in Portugal; History thereof, *ibid.*
 — chronological Succession of the Grand Masters, 729, 730.
 Order of the Annunciade, in Savoy; History thereof, 730.
 — Rules of the Order, *ibid.*
 — chronological Succession of the grand Masters, and Knights, 731, 732.
 Order of St. Lazare, and St. Maurice, in Savoy; History thereof, 732, 733.
 Order of St. Stephen, in Tuscany; History thereof, 733, 734.
 Order of St. George, at Rome; History thereof, 734.
 Order of St. Peter, at Rome; History thereof, *ibid.*
 — of the Spur, at Rome; History thereof, thereof, *ibid.*
 — of Loretto, at Rome; History thereof, *ibid.*
 Order of the Stole, at Venice; History thereof, 735.
 — of St. Mark, at Venice; History thereof, *ibid.*
 Order of the white Eagle, in Poland; History thereof, *ibid.*
 Order of St. Andrew, in Muscovy; History thereof, *ibid.*
 — of St. Catherine, in Muscovy; History thereof, *ibid.*
 Order of the Elephant, in Denmark; History thereof, 735, 736.
 Order of the Seraphims, in Sweden; History thereof, 736.
 — of the Amarante, in Sweden; History thereof, 737.
 Order of the Porte Glaives, or Sword-Bearers, in Livonia; History thereof, *ibid.*
 Order of the black Eagle, in Prussia; History thereof, *ibid.*
 Order, a Sacrament in the Roman Church; Doctrine thereof, 1022, 1023, 1024.
 Ordering Testaments, in Law; Conditions thereof, 288.
 Organ, in Musick; Definition and Description thereof, 535.
 Organ of a Church, its Composition, *ibid.*
 — its Keys, how divided; how played upon, *ibid.*
 — its Pipes of two Kinds; Mechanism thereof, *ibid.*
 — when invented, 536.
 Organ of Sight, in Opticks; Theory thereof, 624.
 Oriental Languages; their Tenses, in Grammar, 72.
 Orle, English, and French Term of Heraldry, Signification thereof, 125.
 Ostrich, Hieroglyphick; Explication thereof, 166.
Otho Venius, a Painter, of the Flemish School; his History and particular Talent, 782.
 Overture, in Musick; Signification thereof, 540.
 Owl, Hieroglyphick; Explication thereof, 165.
 Oxymel, simple, in Pharmacy; Preparation and Virtues thereof, 827.
 Oxymel of Squills; Preparation and Virtues thereof, 828.
 Oxymel, Diuretick of Banderon; Preparation and Virtues thereof, *ibid.*
 Oyster, Hieroglyphick thereof, 166.

P.

P, A Consonant, and the fifteenth Letter of the Alphabet; Remarks of Quintilian thereupon; how pronounced by the several Nations, 62.
 — Its Signification among the numeral Characters of the Antients, 64.
P, in the Italian Musick; Signification thereof, 540.
 Painting on Glass, in Glass-making; Art thereof, 6, 7.
 — by whom invented, 7.
PAINTING, Treatise thereof, 740.
 Painting, in fresco; Art thereof, 749.
 Painting in Oil, Art thereof, *ibid.*
 — on a Wall; Rules thereof, *ibid.*
 Painting

INDEX to the SECOND VOLUME.

- Painting on Wood; Rules thereof, *ibid.*
 — on Cloth, or Canvas; Rules thereof, *ibid.*
 — in Water-Colours; Art thereof, 753.
 — in Miniature; Art thereof, 753, 754.
 — in Mosaick; Art thereof, 754.
 — of Glas; Art thereof, *ibid.*
 — of Marble; Method thereof, *ibid.*
 — of precious Stones; Art thereof, 755.
 — of Wood; Art thereof, 982.
 — on Porcelain; Art thereof, 982.
 Pale, an honourable Ordinary, in Heraldry; Blazon thereof, 111.
 — bore various Ways; its Origin, *ibid.*
 Pallas, in Painting; how painted, 751.
 Pallet, in the English Heraldry; Blazon thereof, 111.
 Palsy, a Disease, in Physick; Definition, Causes, and Division thereof, 919.
 — universal; Definition, and Cause thereof, *ibid.*
 — lateral; Cause thereof, 920.
 — partial; Cause thereof, *ibid.*
 Pally, its Causes, according to De Coetlogon, *ibid.*
 — Its Prognostick and Cure, *ibid.*
 Pampili, a Painter among the Antients; his History and particular Talent, 758.
 Pannes, Term of Heraldry; Signification thereof, 125.
 Panther, Hieroglyphick; Explication thereof, 163.
 Paolo Callini Veronese, a Painter, of the Venetian School; his History and particular Talent, 772.
 Paper of various Kinds, how fold, 797.
 Paper, History of the Manufacture thereof, 797, 798.
 Paper, Linnen; when first introduced among us, 798.
 Paper, Egyptian; Art of making it, 799.
 — History of its Manufacture, *ibid.*
 — Era of the Invention, *ibid.*
 Paper, Bark; History thereof, 800.
 Paper of the Maldiv Islands, *ibid.*
 PAPER-MAKING; Art thereof, 796, 797, 798.
 Papyrus, History thereof, 799, 780.
 Papillione, Term of Heraldry; Signification thereof, 125.
 Paragage, in Grammar; Definition thereof, 76.
 Paronomaty, a Figure, in Rhetorick; Rules and Examples thereof, 1015.
 Paraselen, in Meteorology; Definition, and Formation thereof, 430.
 Parchment, in Paper making; Art of making it, 801.
 Parhelion, in Meteorology; History thereof, 429.
 Park of Artillery, in Gunnery; how disposed, 93, 94, 95.
 Parliament of England; History thereof, in Government, 47.
 — Members thereof, how elected; their necessary Qualifications, 48.
 — Manner of sitting in that august Assembly, 49.
 — Its Affairs are transacted in it, 49, 50.
 P. *Paulus*, a Painter, among the Antients, his History and particular Talent, 758.
 Pave, Hieroglyphick; Explication thereof, 163.
 Pavé, three Kind thereof in the French Heraldry, 111.
 Pavé per pale, in Heraldry; Blazon thereof, *ibid.*
 Pavé per fess, in Heraldry; Blazon thereof, *ibid.*
 Pavé per bend dexter, in Heraldry; Blazon thereof, *ibid.*
 — per bend sinister, Blazon thereof, *ibid.*
 Pavé, Term of Heraldry; Signification thereof, 125.
 Pavilion of Christ, in Incarnation; Doctrine thereof, 255.
 Pavliche, in Painting; what, 757.
 Paternal Power, and Jurisdiction, in Law; Definition and Doctrine thereof, 283.
 Pave, in Painting; how painted, 752.
 Pave, Hieroglyphick; Explication thereof, 163.
 Peccant Hamour, in Physick; Definition thereof, 911.
 Pelagian, Hereticks; their History and Errors, 138, 139.
 Pelagius, Heretick, called by St. Prosper, the least serpent, 125.
 — his personal Character 133.
 — his first Errors, comes to Rome, and is converted; his Conduct in both Places, 134.
 — his second Letter to Demetriade, 141.
 — his third Letter to Demetriade, 142.
 Pelagius, is condemned by the Council of Carthage, and that of Milævium, 144.
 — is banished from Rome by a solemn Edict of the Emperor Honorius, 146.
 Pelegrino Tibaldi, a Painter, of the Roman School; his History and particular Talent, 769.
 Pelican, Hieroglyphick; Explication thereof, 165.
 Penates, in Mythology; their History, 549.
 Pencil, in Painting; different Kinds thereof; how chosen, 749.
 Penis, in Hieroglyphicks; Explication thereof, 161.
 Penitence, a Sacrament in the Roman Church, Doctrine thereof, 1024, 1025.
 — of the primitive Christians, 1025, 1026.
 Perambulation, Term of Forest, Signification thereof, 1078. How used, 1079.
 Perception, in Metaphysick, first Manner thereof, 413, 414.
 — Second Manner, by a clear Idea, 414.
 — Third Manner, by Conscience, *ibid.*
 — Fourth Manner, by Conjecture, *ibid.*
 Perfection, in God, Definition and Distinction thereof, 11.
 — simply simple, in God, Definition and Doctrine thereof, 11, 12.
 — in Part, Definition and Doctrine thereof, *ibid.*
 Peri, French Term of Heraldry, Signification thereof, 125.
 Perin del Vagua, a Painter of the Roman School, his History and particular Talent, 766.
 Period, in Grammar, Definition thereof, 74.
 — celebrated Division thereof, by Aristotle, *ibid.*
 — three Kinds of them allowed in Oratory, 75.
 — Laws and Measures thereof, *ibid.*
 — square, Definition thereof, *ibid.*
 — round, Definition thereof, *ibid.*
 — Difficulties in the Use thereof, according to Father Buffier, *ibid.*
 — in Rhetorick, Definition and Division thereof, 1009.
 — strict Oratorical, Rules thereof, *ibid.*
 — of two Members, Rules thereof, *ibid.*
 — of three Members, Rules and Examples thereof, *ibid.*
 — of four Members, Rules and Examples thereof, *ibid.*
 Peripatetick Philosophy, System thereof, 892.
 — refuted by De Coetlogon, 893, 894.
 Periphrase, in Rhetorick, Definition and Rules thereof, 1016.
 Peripneumony, a Disease, in Physick, Definition and Division thereof, 924.
 — true, Causes, Symptoms, Prognostick, and Cure thereof, *ibid.*
 — Bastard, or spurious, Causes, Symptoms, Prognostick, and Cure thereof, *ibid.*
 Person, in Metaphysick, Definition thereof, 405.
 — in Trinity, how defined, Explication of the Definition, 1167.
 — considered in Concreto, how defined by Boetius, *ibid.*
 — in Abstracto, or Personality, in Trinity, how defined, *ibid.*
 — three consubstantial, in the Trinity, 1177.
 — their Equality among themselves, Proofs thereof, *ibid.*
 — their Order, Proofs thereof, 1177, 1178.
 Personal Services, in Law, Distinction thereof, 237.
 Personality, in Trinity, Doctrine thereof, 1167.
 Perspective, in Painting, Rules thereof, 746.
 PERSPECTIVE, Definition and Division thereof, 802.
 — Linear, Definition thereof, *ibid.*
 — Aerial, Definition thereof, *ibid.*
 — Specular, Definition thereof, *ibid.*
 — Planes, in Perspective, Definition and Division thereof, *ibid.*
 — Lines, several different Sorts thereof, *ibid.*
 — Pavement, how exhibited, *ibid.*
 — Circle, how exhibited, *ibid.*
 — of a regular Pentagon, how exhibited, *ibid.*
 Peter and Henry de Bruijs, Dogmatists, 158.
 Peter Abellard, Heretick, his History and Errors, *ibid.*
 Peter of John, Heretick, his History and Errors, *ibid.*
 Peter Candito, a Painter of the Flemish School, his History and particular Talent, 780.
 Peter and Francis Pourbus, Painters of the Flemish School, their History and particular Talent, 781.
 Peter Paul Rubens, a Painter of the Flemish School, his History and particular Talent, 782, 783.
 — Remarks on his Works, 783, 784.
 Peter Mignard, a Painter of the French School, his History and particular Talent, 794.
 Phædrus, a Fabulist, in Poetry, his History, 977.
 Phantasy, in Metaphysick, Definition thereof, 415.
 Pharisees, a Sect among the Jews, in Judaism, History thereof, 264.
 PHARMACY, Definition and Division thereof, 807.
 — Galenical, Definition thereof, *ibid.*
 — Chymical, Definition thereof, *ibid.*
 Pheon, Term of Heraldry, Signification thereof, 125.
 Philip Melancthon, Luther's Disciple, his History and particular Character, in Lutheranism, 357.
 Philip Lippi, a Painter of the Roman School, his History and particular Talent, 760.
 PHILOSOPHY, Definition thereof, by De Coetlogon, Explication of his Definition, 888.
 — by Pythagoras and Epictetus, 889.
 — by Gale, refuted by De Coetlogon, 889, 890.
 — Division thereof, 890.
 — speculative, Definition thereof, *ibid.*
 — practical, Definition thereof, *ibid.*
 Phosphorus, in the Appendix to Opticks, Definition and Division thereof, 656.
 — Natural, History thereof, *ibid.*
 — Artificial, three Kinds thereof, *ibid.*
 — burning, Preparation thereof, 656, 657.
 — Phænomena thereof, 657.
 — by whom invented, 658.
 — Remarks thereupon, *ibid.*
 — extracted out of the phœcal Matter, Preparation and Phænomena thereof, 659.
 — prepared out of the Bononian Stone, its Phænomena, 659, 660.
 — Hermetick of Balduinus, Preparation and Phænomena thereof, 663, 664.
 Phrase, in Grammar, Definition and Division thereof, 75.
 Phrase, compleat, Definition thereof, *ibid.*
 — incomplete, Definition thereof, *ibid.*
 Phrenzy, a Disease, in Physick, Causes, Symptoms and Cure thereof, 920.
 Phthisis, a Disease, in Physick, Causes, Symptoms and Cure thereof, 922.
 PHYSICK, or Medicine, Definition thereof, by De Coetlogon, Explication of his Definition, 909.
 — Division thereof, *ibid.*
 Pietro Cosimo, a Painter of the Roman School, his History and particular Talent, 761.
 Pietro Perugin, a Painter of the Roman School, his History and particular Talent, 762.
 Pietro Brecchini, a Painter, of the Roman School; his History and particular Talent, 769.
 Pile, an Ordinary in Heraldry; Blazon thereof, 112.
 — Its Signification according to Mackenzy; how borne, 113.
 Pills, in Pharmacy; Definition and History thereof, 844.
 Pills of Agarick; Preparation, Virtues, and Doses thereof, *ibid.*
 — golden; Preparation, Virtues, and Doses thereof, *ibid.*
 — golden of Turbith; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Aloes and Mastic; Preparation, Virtues, and Doses thereof, *ibid.*
 — stomachick; Preparation, Virtues, and Doses thereof, *ibid.*
 — common; Preparation, Virtues, and Doses thereof, *ibid.*
 — hepatick; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Rhubarb; Preparation, Virtues, and Doses thereof, 845.
 — catholick; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Dropsy; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Tartar; Preparation, Virtues, and Doses thereof, *ibid.*
 — Magistral of Gum Ammoniac; Preparation, Virtues, and Doses thereof, *ibid.*
 — hysseric; Preparation, Virtues, and Doses thereof, *ibid.*
 Pills

INDEX to the SECOND VOLUME.

Pills Arthritick, Preparation, Virtues, and Doses thereof, *ibid.*
 — of Hellebore; Preparation, Virtues, and Doses thereof, *ibid.*
 — Mercurial; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Sagapenum; Preparation, Virtues, and Doses thereof, 846.
 — for the Cholick; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Mania; Preparation, Virtues, and Doses thereof, *ibid.*
 — Cephalick; Preparation, Virtues, and Doses thereof, *ibid.*
 — for a quartan Ague; Preparation, Virtues, and Doses thereof, 847.
 — for the iliack Passion, or Miserere; Preparation, Virtues, and Doses thereof, *ibid.*
 — Magistral of Opium; Preparation, Virtues, and Doses thereof, *ibid.*
 — for a Cough; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Turpentine reformed; Preparation, Virtues, and Doses thereof, *ibid.*
 — for a Hoarseness; Preparation, Virtues, and Doses thereof, 848.
Pilula coccie majores; Preparation, Virtues, and Doses thereof, 844.
 — *minores*; Preparation, Virtues, and Doses thereof, *ibid.*
Pilula angelice; Preparation, Virtues, and Doses thereof, *ibid.*
 — *sine quibus*; Preparation, Virtues, and Doses thereof, *ibid.*
Pilula fetide majores; Preparation, Virtues, and Doses thereof, 845.
 — *minores*; Preparation, Virtues, and Doses thereof, 846.
Pilula de tribus; Preparation, Virtues, and Doses thereof, *ibid.*
 — *de duobus*; Preparation, Virtues, and Doses thereof, *ibid.*
 — *de sex*; Preparation, Virtues, and Doses thereof, 847.
Pilula narcotice; Preparation, Virtues, and Doses thereof, *ibid.*
 — *diuretica*; Preparation, Virtues, and Doses thereof, 848.
 — *detergentes*; Preparation, Virtues, and Doses thereof, *ibid.*
Pilule ad sistendam gonorrhœam; Preparation, Virtues, and Doses thereof, *ibid.*
 — *ad gonorrhœam virulentam*; Preparation, Virtues, and Doses thereof, *ibid.*
 — *sudorifica*; Preparation, Virtues, and Doses thereof, *ibid.*
 — *senectutis*; Preparation, Virtues, and Doses thereof, *ibid.*
Pincy Luxembourg, Dutchy in France; when, and by whom erected, 616.
 Piston, in Hydraulicks; Description and Use thereof, 205.
 Plague, a Disease, in Physick; History, Causes, Symptoms, and Cure thereof, 928.
 Plain Table, in Surveying; Definition and Description thereof, 1076.
 Plain Table, how used in Surveying, to find the Distance of any inaccessible Place, 1077.
 — to take an Angle by it, when considered as a Theodolite, *ibid.*
 — to make an Angle by it, when considered as a Semi-circle, *ibid.*
 Plate, in Glass-making; how blown, 4.
 — how cast, 5.
 Platonism, or Platonick Philosophy; System thereof, 891.
 Plethora, in Physick; Definition and Causes thereof, 911.
 Plourisy, in Physick; Causes, Symptoms, and Cure thereof, 923, 924.
 PLUMBERY; Art thereof, 942.
 Pluto, Hieroglyphick; Explication thereof, 170.
 Pluto, in Painting; how painted, 751.
 PNEUMATICKS; Treatise thereof, 943.
 Poem, in Poetry; several Kinds thereof, 963.
 Poetry, a Treatise thereof, 960.
 Point, an Ordinary, in Heraldry; Blazon thereof, 125.
Polidore Caravaggio, a Painter of the Roman School; his History and particular Talent. Remarks on his Works, 765.
 Polverine, or Rochetta; Ashes which enter the Composition of Glass, 2.
Pondicieux, Dutchy in France, when, and by whom erected, 616.
 Pone, in Law; what, 316.
 Pone per vadium; what, *ibid.*
 Pontegello, an Iron Instrument used in Glass-making, 3.
 Porcelain, in Pottery; Art of making it, 981.
 — where made, 985.
 — French and Saxon; History thereof, *ibid.*

VOL. II.

— how joined when broken, *ibid.*
 POTTERY; Art thereof, 980.
 Powder, in Pharmacy; Definition, and History thereof, 339.
 Powder diatubith cum rheo; Preparation and Virtues thereof, *ibid.*
 — Saxon; Preparation, Virtues, and Doses thereof, *ibid.*
 — purgative, good for all the cold Distempers of the Brain, *ibid.*
 — for Worms; Preparation, Virtues, and Doses thereof, *ibid.*
 — laxative; Preparation, Virtues, and Doses thereof, *ibid.*
 — solutive de tribus; Preparation, Virtues, and Doses thereof, 340.
 — excellent Antiepileptick; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Dysentery; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Phthisick; Preparation, Virtues and Doses thereof, 839.
 — Gascoun; Preparation, Virtues, and Doses thereof, 840.
 — to help Digestion; Preparation, Virtues, and Doses thereof, *ibid.*
 — to appease the Cough of Children; Preparation, Virtues, and Doses thereof, *ib.*
 — for the Ulcers of the Throat; Preparation, Virtues, and Doses thereof, *ibid.*
 — of the Emperor Ferdinand, for the Plague; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Diarrhodon Abbatis; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Piles; Preparation, Virtues, and Doses thereof, 841.
 — of Verbasum, for the same; Preparation, Virtues, and Doses thereof, *ibid.*
 — to embalm a dead Corpse; Preparation, Virtues, and Doses thereof, *ibid.*
 — to wrap in a dead Body; Preparation, Virtues, and Doses thereof, *ibid.*
 — to cleanse the Hands, Preparation, Virtues, and Doses thereof, *ibid.*
 Powdering, Term of Heraldry; Signification thereof, 125.
 Practical Musick; Definition thereof, 507.
 Practical Philosophy; System thereof, 890.
 Prædial Servitude, in Law; what, 287.
 Precedency of the King of France, among Christian Kings, on what founded, according to Sir George Mackenzy, 127.
 Precept, in Law; what, 316.
 Predesination, in God, and his Attributes; Definition and Doctrine thereof, 31.
 — Sentiment of the Pelagians thereupon, 32.
 — that of the Catholick Church, 32, 33.
 Predesination; Signs thereof, 33.
 Predesination, whether certain or uncertain, 33, 34.
 Pregnancy, in Midwifry; Symptoms thereof, 438.
 Prelude, in Musick; Definition thereof, 531.
 Prefa, Term of Musick; Signification thereof, 540.
 Prescience, in God; Definition and Doctrine thereof, 31.
 Prescription, in Law; how defined by Tourril, 287.
 — how understood in the common Law, 288.
 — in the civil Law, *ibid.*
 — in Normandy and France, *ibid.*
 — how in the Inquisition, *ibid.*
 Preservative Indication, in Musick; Doctrine thereof, 912.
 Pressure of the Fluids, in Hydraulicks; Doctrine thereof, 203.
 Presto, Term of Musick; Signification thereof, 540.
 Prestissimo, Term of Musick; Signification thereof, 540.
 Preterition, in Rhetorick; Definition and Rules thereof, 1012.
 Pricker, what, in Hunting, 189.
 Printers; the most famous in Europe, 991.
 PRINTING; Art thereof, 985, 986, 987.
Priscillian, Heresiarch; his History and Errors, 138.
Priscillianists, Hereticks; their History and Errors, *ibid.*
 Prism, in Dioptricks; Phenomena and Use thereof, 655.
 Problems; two of Aristotle upon Glass, 6.
 Procello's, Iron Instruments, used to widen Glasses, in Glass-making, 3.
 Processions, in the Trinity; their Number, and Proofs thereof, 1169.
 Procession, of the second Person in God; Doctrine thereof, 1170.

Procession of the Holy Ghost; Doctrine thereof, 1171.
 Processions, divine, their Principles; Doctrine thereof, 1172.
 Proof of a Brass Cannon, in Gunnery; how made, 103.
 — of a Mortar, *ibid.*
 Profil, in Perspective; Definition thereof, 806.
 Prolation, in Musick, two Sorts thereof, 520.
 Prolation, perfect and imperfect, Definition thereof, *ibid.*
 Prologue, in Poetry, three Kinds thereof, 966.
 Pronoun, in Grammar, Definition thereof; why thus called, 67.
 Pronouns, incomplete, Definition thereof, *ibid.*
 — personal; Definition thereof, *ibid.*
 — relative; Definition thereof, *ibid.*
 — possessive; Definition thereof, 68.
 — demonstrative; Definition thereof, *ib.*
 — indefinite; Definition thereof, *ibid.*
 — substantive, and adjective; Definition thereof, *ibid.*
 Prophylactick, in Physick; Signification and Doctrine thereof, 916.
 Proper, Term of Heraldry; Signification thereof, 125.
 Proportion of the Ingredients, which enter the Composition of Gunpowder, in Gunnery; Mielthus's Reflexions thereupon, 87.
 Proportions observed by Keller, in the Mixture of the Metal for casting Pieces of Ordinance, 101, 102.
 Proportions given to an Iron-piece of 36, for Land-Service, 103.
 — to an Iron-piece of 18, for Land-Service, 103, 104.
 — to an Iron-piece of 8, 104.
 — to an Iron-piece of 4, for Land-Service, *ibid.*
 Proportion, in Musick; Definition, and Division thereof, 540.
 Proportion of Equality, in Musick; Definition thereof, *ibid.*
 — of Inequality, in Musick; three Kinds thereof, *ibid.*
 Proportions; Table thereof, 541.
 Proposition, in Logick; Definition, and Difference thereof, 328.
 Propositions, universal affirmative; Rules and Examples thereof, 328, 329.
 — simple; Explication thereof, 329.
 — composite; Explication thereof, *ib.*
 — incident; Nature thereof, 330.
 — copulative; Rules, and Examples thereof, 331.
 — disjunctive; Rules, and Examples thereof, *ibid.*
 — contradictory; Rules, and Examples thereof, *ibid.*
 — conditional; Rules, and Examples thereof, *ibid.*
 — causal; Rules, and Examples thereof, *ibid.*
 — disjunctive; Rules, and Examples thereof, *ibid.*
 Propopoeia, in Rhetorick; Definition and Rules thereof, 1013.
Propper, St. his Letter to St. Augustin, occasioned by the Semi pelagianism, 149.
Protopene, a celebrated Painter among the Antients; his History, and particular Talent, 758.
 Protractor, in Surveying; Definition, Description, and Use thereof, 1080.
 Providence, in Painting; how painted, 752.
 Prothesis, in Grammar; Definition thereof, 76.
 Pulley, in Mechanicks; Description, and Use thereof, 377.
 Pump, in Hydraulicks; Definition, and Division thereof, 205.
 Pump, common or sucking; its Mechanism, and manner of acting, *ibid.*
 — forcing; Description thereof, and its manner of acting, *ibid.*
 — Ctezebes; Description thereof, and its manner of acting, *ibid.*
 Puocoli, a kind of Pebbles which enter the Composition of Glass, in Glass-making, 2.
 Purslew, Term of Heraldry; Signification thereof, 125.
 Purification of the blessed Virgin, in Incarnation; Doctrine thereof, 253.
 Purple, a Colour, in Heraldry; Blazon thereof, 108.
 Pyramid, or Obelisk, in Hieroglyphick; Explication thereof, 167.
 Pyrites, in Minerals; Definition, and History thereof, 494.
 Pyromachy, a Kind of Stone, to line the Inside of Glass Furnaces, in Glass-making, 3.
 PYROTCHNY; Treatise thereof, 991.

14 S

Pyrrho-

INDEX to the SECOND VOLUME.

- Pyrrhonian* Philosophy, System thereupon, 895.
 — De Coetlogon's Remarks thereupon, 900.
Pythagorean Philosophy, System thereof, 895.
 — De Coetlogon's Sentiment thereupon, 896.
- Q
- Q**, A Consonant, and the sixteenth Letter of the Alphabet, form'd from the Hebrew Caph; never used by some Grammarians; its Sound and that of *q* very near a-kin in the French, 62.
 — made a double Letter by some Authors, *ibid.*
 — Its Signification among the numerical Characters of the Antients, 64.
 Quadrate, or Quadro, in Musick; Signification thereof, 290.
 QUAKERISM, History thereof, 995.
 Qualities of the Colours, in Painting; History thereof, 751.
 Quality, and Difference of Heirs, in Law; Doctrine thereof, 290.
 Quarter, in Heraldry; Form and Blazon thereof, 125.
 Quartering, Term of Heraldry; Signification thereof, *ibid.*
 Questions, in Rhetorick, either of Words or Things, 372.
 Questions of Things, four principal Kinds thereof, 342, 343.
 Quinly, a Disease, in Physick; Causes, Symptoms, and Cure thereof, 921, 922.
Quintin Meffis, a Painter, of the Flemish School; his History and particular Talent, 980.
- R
- R**, A Consonant, and the seventeenth Letter of the Alphabet, 62.
 — what among the Hebrews; how called by Perſius, *ibid.*
 — Its Sound among the Romans, 62, 63.
 — when pronounced in the French, *ibid.*
 — Its Signification among the numerical Characters of the Antients, 64.
 Racourci, French Term of Heraldry; Signification thereof, 125.
 Radiant Point, in Opticks; Definition thereof, 633.
 Radish, Hieroglyphick; Explication thereof, 159.
 Rain, in Meteorology; Definition and Theory thereof, 423, 424.
 Rains, preternatural; History thereof, 424.
 Rainbow, in Meteorology; first accounted for by *Anton. de Dominis*, 425.
 — Theory thereof, 426, 427.
 — Its Dimensions first taken by *Des Cartes*; and its Diameter determined by *Dr. Halley*, 428.
 — Its Phenomena, *ibid.*
 Rainbow marine, History and Theory thereof, 429.
 Ram, a Machine of War, among the Antients; four Kinds thereof, 105.
 — compound, how described by *Josephus*, *ibid.*
 — fourth Kind described by *Fellibien*, *ibid.*
 — when invented, according to *Vitruvius*; Improvements made to it by *Pephaſmenos*, *ibid.*
 — how managed, *ibid.*
 Rampant, Term of Heraldry; Signification thereof, 125.
 Range, French Term of Heraldry; Signification thereof, *ibid.*
Raphael Sanzio, a Painter, of the Roman School; his History and particular Talent, 462, 463.
 — Remarks on his Works, 463.
 Ratiocination, or Reasoning, in Logick; Nature thereof, 169.
 — short and long, *ibid.*
 — how called when founded on a false Argument, *ibid.*
 Ray, in Opticks; Definition thereof, 632.
 Rays, in Opticks; their Phenomena, 633.
 Robas's in Heraldry; Blazon thereof, 125.
 Roebuck, in Hunting; what, 189.
 Recrete, French Term of Heraldry; Signification thereof, 125.
 PLUMING, Art thereof, 998.
 Reming Gold with Antimony; Process thereof, 999.
 — with sublimate; Process thereof, *ibid.*
 — with Lead and Mils, Process thereof, *ibid.*
- Refining Silver with Lead; Process thereof, 1000.
 — with Salt-petre; Process thereof, *ibid.*
 Refining Copper, Process thereof, *ibid.*
 — Tin, Process thereof, *ibid.*
 — Lead, Process thereof, *ibid.*
 Reflexion of Light, in Opticks; how effected, 628.
 — Phenomena thereof, *ibid.*
 Refraction of Light, in Opticks; how effected, 628, 629.
 Refraction; Laws thereof, 643.
 — on a plain Surface; Laws thereof, 644.
 — in spherical Surfaces; Laws thereof, 645.
 — with Regard to Lens's; Phenomena thereof, 646.
 Regardant, Term of Heraldry; Signification thereof, 125.
 Rein-Deer, in Hunting; History thereof, 189.
 Relation in the Trinity; Definition and Division thereof, 1172.
 — real; Proofs thereof, *ibid.*
 — transcendental; Proofs thereof, 1173.
 Relations, four of them of Origin, in the Divinity, *ibid.*
 Relative Gravity, in Mechanicks, Definition thereof, 375.
 RELIGION, Definition and Division thereof, 1001.
 — natural; Definition thereof, *ibid.*
 — revealed; Definition thereof, *ibid.*
 — Jewish; Definition thereof, *ibid.*
 — Christian; History thereof, 1003, 1004, 1005.
 Religions taken in a modern Signification; Dissertation thereupon, 1003, 1004.
 Religion, Pagan, or Idolatry; History thereof, 1005.
 Remedy, in Pharmacy; Definition thereof, 807.
 Remedies, in Pharmacy, simple; Definition thereof, *ibid.*
 — compound; Definition thereof, *ibid.*
 — alterative; Definition and Virtues thereof, *ibid.*
 — purgative; Definition and Virtues thereof, *ibid.*
 — cathartick; Definition and Virtues thereof, *ibid.*
 — phlegmagogue; Definition and Virtues thereof, *ibid.*
 — chalogogues; Definition and Virtues thereof, *ibid.*
 — melanagogue; Definition and Virtues thereof, *ibid.*
 — hidragogue; Definition and Virtues thereof, *ibid.*
 — panchymagogue; Definition and Virtues thereof, *ibid.*
 — emetick; Definition and Virtues thereof, *ibid.*
 — diaphoretick; Definition and Virtues thereof, *ibid.*
 — diuretick; Definition and Virtues thereof, *ibid.*
 — strengthening; Definition and Virtues thereof, *ibid.*
 — cordial, or cardiack; Definition and Virtues thereof, 808.
 — cephalick; Definition and Virtues thereof, *ibid.*
 — ophthalmick; Definition and Virtues thereof, *ibid.*
 — dentrick; Definition and Virtues thereof, *ibid.*
 — pectoral; Definition and Virtues thereof, *ibid.*
 — stomachick; Definition and Virtues thereof, 809.
 — hepatick; Definition and Virtues thereof, *ibid.*
 — splenick; Definition and Virtues thereof, *ibid.*
 — hysterick; Definition and Virtues thereof, *ibid.*
 — carminative; Definition and Virtues thereof, *ibid.*
 Replications, in Law; Doctrine thereof, 304.
 Reprobation, in God and his Attributes; Definition thereof, 35.
 Reprobation, negative of the Tomists; Doctrine thereof, 35, 36.
 Republic of Venice; Government thereof, 51.
 — of Holland; Government thereof, 52, 53.
 Resurrection of Christ, in Incarnation, by what Virtue effected, 258.
 — in what Manner effected, 259.
 — Necessity thereof, *ibid.*
 — the Cause of ours, and our Salvation; Proofs thereof, 259, 260.
- Resurrection universal of the Bodies, in Incarnation; Proofs thereof, 262.
 — in what Manner to be effected, *ibid.*
Retbelets, Dutchy, in France; when, and by whom erected, 617.
 Reversed, Term of Heraldry; Signification thereof, 125.
 Rhetorick; Definition and Division thereof, 1007.
 Rheumatick Madneſs, a Disease of Dogs, in Hunting; Cure thereof, 189.
 Rheumatism; Definition and Division thereof, 938.
 — universal; Definition thereof, *ibid.*
 — particular; Definition thereof, *ibid.*
 Rheumatism, Causes, Symptoms, Prognostick, and Cure thereof, *ibid.*
 Rhinoceros, Hieroglyphick; Explication thereof, 162.
 Rhumb, in Navigation; Definition, Division, and Theory thereof, 589.
 Rhumb-line, in Navigation, Description, Origin, and Properties thereof, *ibid.*
 Ribband, or Ribbon, in Weaving; several Sorts thereof, 1205.
Richelieu, Dutchy, in France; when, and by whom erected, 617.
 Rigging a Ship of 123 Feet in Length, and 28 in Breadth; Method thereof, 573.
 Right of Persons, in Law; Doctrine thereof, 282, 283.
 Ring, in Jewellers, Origin thereof, 234.
 — when first introduced among the *Hebreus, Chaldeans, Persians, Sabines, &c.* *ibid.*
 Rings, different Kinds thereof among the Antients; became the Badge of Knights, *ibid.*
 Rings, Rush; History thereof, *ibid.*
 Rings, Manner of wearing them, *ibid.*
 Ripieno, Term of Musick; Signification thereof, 541.
 Ripresa, in Musick; Signification thereof, *ibid.*
 — Maggiore; Signification and Rules thereof, *ibid.*
 — Minore; Signification and Rules thereof, *ibid.*
 Rivers, in Hydraulicks and Hydrostaticks; History and Theory thereof, 208, 209.
 Rivoltare, Term of Musick; Signification and Rules thereof, 541.
Rochefoucault, Dutchy, in France; when, and by whom erected, 616.
 Roe-buck, in Hunting; its different Names according to the Difference of its Age; how hunted, 193.
Roban, Dutchy, in France; when, and by whom erected, 616.
Roman Taste, in Painting, 795.
 Rompu, French Term of Heraldry, Signification thereof, 126.
 Rose, Hieroglyphick; Explication thereof, 169.
Rouanez, Dutchy, in France; when, and by whom erected, 617.
 Round-Glasses, in Glass-making; how blown, 3.
 Roundle, an Ordinary, in Heraldry; Blazon thereof, 126.
 Ruby, in Lapidary; three Kinds thereof, 272.
 — how formed, *ibid.*
 — how counterfeited, *ibid.*
 — where found, *ibid.*
 — their Value, *ibid.*
 Rudder, Hieroglyphick; Explication thereof, 168.
 — seen on the Coins of *Septimus Geta*, and of *Domitian*, *ibid.*
 Rudder of a Ship; Proportions thereof, 578.
 — of a Galley; how placed, 584.
 Rules of a Syllogism, in Logick; Number thereof, 334.
 — first; *ibid.* second; 335. third; *ibid.* fourth; *ibid.* fifth, sixth, seventh, eighth, Doctrine thereof, *ibid.*
 Rules of the first Figure, in Logick; Number, Doctrine, and Examples thereof, 335, 336.
 — of the second; Number, Doctrine, and Examples thereof, 336.
 — of the third; Number, Doctrine, and Examples thereof, 336, 337.
 — of the fourth Figure; Number, Doctrine, and Examples thereof, 337.
 Rules of Axioms, in Logick; Number and Doctrine thereof, 345.
 Rules of the Communication of Motions, in Mechanicks; their Number, according to *Des Cartes*, 386, 387.
 Running Madneſs, a Disease of Dogs; Cure thereof, 189.

S.

S, A Consonant, and the Eighteenth Letter of the Alphabet, in Grammar; studiously avoided by some of the Antients; variously changed in the Inflections of Nouns; how used in the French, 63.
 — Its Signification among the numeral Characters of the Antients, 64.
Sabians, a Sect among the Jews, in Judaism; History thereof, 265, 266.
Sabellians, Hereticks; their History and Errors, 136.
Sabellius, Heresiarch; his History and Errors, *ibid.*
 Sable, a Colour, in Heraldry; Blazon thereof, 108.
 SACRAMENTS; Treatise thereof, 1021.
 Sacraments of the Law of Moses; Number thereof, 1021.
 Sacraments of the Law of Grace; their Number, *ibid.*
 — their Causes, Matter, Form, and Effects, 1022.
 SACRED HISTORY, 1035.
Sadducees, a Sect among the Jews, in Judaism; History thereof, 264, 265.
 Sail, in Naval Architecture; very unequal, in their Measures, 576.
 — different Kinds thereof, 577.
 — main; its Breadth and Length, 576.
 — net-marsh-bonet, Breadth and Length thereof, *ibid.*
 — fore; its Breadth and Length, *ibid.*
 — main-top; its Breadth and Length, *ibid.*
 — fore-top; its Breadth and Length, *ibid.*
 — sprit; its Breadth and Length, *ibid.*
 — mizzen; its Breadth and Length, *ibid.*
 — of the Main-stay; its Breadth and Length, *ibid.*
 — of the Mizzen-stay; its Breadth and Length, *ibid.*
 — of the Mizzen-top Gallant; its Breadth and Length, *ibid.*
 — of the Stay of the Main-top-Mast; its Breadth and Length, *ibid.*
 — of the Top-gallant of the Bowsprit; its Breadth and Length, *ibid.*
 Salamander, Hieroglyphick; Explication thereof, 164.
 Salient, Term of Heraldry; Signification thereof, 126.
 Saltier, in Heraldry; History and Blazon thereof, 111.
 Salutation, at Sea, in Navigation; different Manners thereof, 610.
 Saluting with the Flag, at Sea; how performed, *ibid.*
 — with the Sails; how performed, *ibid.*
Samseti, Paul; his History and Errors, 136.
Samuel Cooper, an English Painter; his particular Talent, 795.
 Sand to make Glass with, the best, in Glass-making, 2.
 Sanguine, a Colour, in the English Heraldry; Blazon thereof, 108.
 Sapphick Verse, in Poetry; Rules thereof, 962.
 Sapphire, Hieroglyphick; Explication thereof, 167.
 Sapphire, in Lapidary; different Sorts thereof, where found, and their different Value, 272.
 Sarcasm, in Rhetorick; Definition thereof, 1014.
 Sardonyx, a precious Stone, in Lapidary; its Beauty and Value, 274.
 Sarosel, in Glass-making; what, 3.
 Satin, in Weaving; different Sorts thereof, 1206.
 — Indian; Description and History thereof, *ibid.*
 Satinade, in Weaving; Description thereof, *ibid.*
 Satisfaction of Christ, in Incarnation; Doctrine thereof, 240, 241.
 Satyr, in Poetry; Definition and Rules thereof, 971.
 Satyr; Division thereof, 972.
 — narrative; Definition and Rules thereof, *ibid.*
 — dramatick; Definition and Rules thereof, *ibid.*
 — mixt; Definition and Rules thereof, *ibid.*
 — grave; Definition and Rules thereof, *ibid.*
 — sportive; Definition and Rules thereof, *ibid.*
 — general; Definition and Rules thereof, *ibid.*

Satyr, perfonal; Definition and Rules thereof, *ibid.*
 Satyr; Remarks of *Casaubon*, *Scaliger*, and *Dacier* thereupon, *ibid.*
 Satyrs, antient Roman; History thereof, 973.
 Satyrs, in Mythology; their History, 552.
 Satyrists, antient and modern, 971.
 — Italians, 972.
 Saucisson, in Pyrotechny; how composed, 993, 994.
 Saucissons, flying; how made, *ibid.*
 Scab, which sometimes covers the Head and Face of young Children; Causes, Symptoms, and Cure thereof; in Midwifry, 487.
 Scarp, Term of Heraldry; Signification thereof, 126.
 Scene, in Drama; Rules thereof, 965.
 Scenographick Perspective; Doctrine thereof, 824.
 Scenographick Perspective of a Cube, how exhibited, *ibid.*
 Scenography of a hollow quinquangular Prism, *ibid.*
 Scenography of a Cylinder; how exhibited, *ib.*
 — of a Pyramid standing on its Base; — of a truncated Pyramid; how exhibited, *ibid.*
 — of Walls, Columns, &c. how exhibited, *ibid.*
 — of a Door, in Building; how exhibited, *ibid.*
 Scepter, Hieroglyphick; Explication thereof, 167.
 Science of God, Definition thereof, 27.
 — of simple Intelligence, otherwise called Architype Idea; Doctrine thereof, *ibid.*
 — of Vision; Doctrine thereof, 27, 28.
 — of conditional Futures; Doctrine thereof, 28.
 Science of Adam, in the State of his Innocence; what, 1119.
 Scorpion, Hieroglyphick; Explication thereof, 164.
 Scorpion, a Machine of War, among the Antients; Description and Use thereof, 106.
 Screw, in Mechanicks; Description and Use thereof, 379, 380.
 SCULPTURE, Definition, Division, and History thereof, 1059.
 Scurvy, a Disease, in Physick; Causes, Symptoms, Prognostick, and Cure thereof, 931.
 Scyrrhe, of the Matrice, in Midwifry; Causes, Symptoms, and Cure thereof, 474.
 Sea, in Heraldry; Blazon thereof, 113.
 Seal-Skin, used in Hat-making, 106.
Sebastian Bourdon, a Painter of the French School; his History and particular Talent, 792.
 Secant, in Trigonometry; Definition thereof, 1162.
 Section, in Grammar, how marked, 76.
 Secondary, a Derivation in Languages; what, 77.
 Security, in Painting; how painted, 752.
 Seed, in Natural History; Definition thereof, 563.
 Seed, in the Animal Economy, Theory thereof, 564.
 Seed, in Botany; Theory thereof, 564, 565.
 Seeds of Fern, and of the capillary Plants; by whom first discovered, 565.
 Segreant, Term of Heraldry; Signification thereof, 126.
 Semi-circle, an Instrument in Surveying; Description and Use thereof, 1076.
 Semicolon, in Grammar; Description and Use thereof, 75.
Semipelagianism, Heresy; History thereof, 148, 149.
 Sentences, in Grammar; Doctrine thereof, 73.
 — simple, Definition and Use thereof, 74.
 — conjunct, Definition and Rules thereof, *ibid.*
 Sentences, in Rhetorick; Figures thereof, 1012.
 September, a Month, in Painting; how painted, 752.
 Sequestration, in Law; Definition and Rules thereof, 292.
Sergius, Patriarch of Constantinople, a famous Monothelite; his History and Errors, 155.
Sergius, an abominable Monk; his History, in Mahometanism, 371.
 Serious Reflections on the Power and Conduct of the House of Commons of the Parliament of England, by *De Coetlogon*, 47, 48.
 — on the English Government, by the same, 51.
 Serpent, Hieroglyphick; Explication thereof, 164.
 Servitude, in Law; two Sorts thereof, 287.

Servitude urbane, Definition thereof, *ibid.*
 — rustick; Definition thereof, *ibid.*
 Severians, Hereticks; their History and Errors, 134.
Severus, Heresiarch; his History and Errors, *ib.*
Seurre Bellegarde, Dutchy in France; when; and by whom erected, 616.
 Shagreen, in Shamoising; how prepared, 1062.
 SHAMOISING; Art and History thereof, 1061.
 Sheep, Hieroglyphick; Explication thereof, 163.
 Sheets of Lead; how cast, in Plumbery, 942, 943.
 Shell-gold, in Gold-beating; how prepared, 36.
 Shells, in Natural History; their History and Use, 561.
 — a great Ornament in the Cabinet of the Curious; their respective Names as such, *ib.*
 Shells frequently found far from the Sea, or under Ground; *Dr. Lister's* Remarks thereupon, *ibid.*
 Shells, litoral; what, *ibid.*
 Ship, Hieroglyphick; Explication thereof, 168.
 — what among the Athenians, Tyrians and Romans, *ibid.*
 Ships, in Naval Architecture; their Proportions, 579.
 Shoes for Horses, several Sorts thereof, 176.
 Shoes with Rings; Description and Use thereof, *ibid.*
 — with Calkings; Description and Use thereof, *ibid.*
 — with swelling Welts, or Borders; Description and Use thereof, *ibid.*
 — Pantons or Pantables; Description and Use thereof, *ibid.*
 — Patten; Description and Use thereof, *ib.*
 Shocing of Horses, in Horsemanship; Art thereof, *ibid.*
 Shores, or Supporters, in Naval Architecture, Proportions thereof, 577.
 Sight, in Opticks, Excellence and Organ thereof, 624. Description of that Organ, 625.
 Signals used at Sea, in Navigation; several Sorts thereof, 607.
 Signals by Day; Number, Difference, and Rules thereof, 607, 608.
 Signals by Night; Number, Difference, and Rules thereof, 608.
 — for calling the Officers on board the Admiral; Number, Difference, and Rules thereof, 609.
 — when a Fleet sails in a Fog, 608, 609.
 — for managing a Sea Fight; Number, Difference and Rules thereof, 609, 610.
 Signals, French; Manner thereof, *ibid.*
 Signs, in Logick; three Divisions thereof, 324.
 Signs, in Physick; Definition and Division thereof, 913.
 — dignostick; Definition thereof, *ibid.*
 — prognostick; Definition thereof, *ibid.*
 — pathognomonick; Definition thereof, *ib.*
 Signs of a Crisis; what, *ibid.*
 Silk, in Weaving; Definition thereof, 1203.
 — Manufacture thereof, when first invented, *ibid.*
 — when first brought into Europe, and by whom, *ibid.*
 — how winded from the Balls, 1203, 1204.
Silemus, his Figure, in Hieroglyphicks; Explication thereof, 170.
 Silks, different Kinds thereof, 1204.
 — raw, Description thereof, *ibid.*
 — boiled, Preparation thereof, *ibid.*
 — thrown or twisted; Preparation thereof, *ib.*
 — slack, Description thereof, *ibid.*
 — eastern, History and Qualities thereof, *ib.*
 — French, History and Qualities thereof, *ib.*
 — Spanish, History thereof, 1205.
 — Turkey, History and Qualities thereof, *ib.*
 — Persian, History thereof, *ibid.*
 — China, History thereof, *ibid.*
 — Japan, History thereof, *ibid.*
 — of the Mogulistan; History and Qualities thereof, *ibid.*
 Silver, in Metals; where found, 395.
 — how separated from the Ore, *ibid.*
 — Manner of making it into Piners, 396.
 — how separated from the Ore in Europe, *ib.*
Simon Magus, first Heresiarch; his History and Errors, 131, 132.
Simon Vouet, a Painter of the French School; his History and particular Talent, 789.
 Simple Deposite, in Law; Definition thereof, 292.
 Simple Machines, in Mechanicks; Definition and Number thereof, 375.
 Simple Counterpoint, in Musick; Rules thereof, 526.
 Sine, in Trigonometry; Definition thereof, 1169.
 — whole; Definition thereof, *ibid.*

Sine

INDEX to the SECOND VOLUME.

- Sine verfed, Definition thereof, *ibid.*
 — of Tangents, Definition thereof, *ibid.*
 Sinecomplement, Definition thereof, *ibid.*
 Siphon, in Hydraulicks; Definition and Theory thereof, 206.
 Sir Godfrey Kneller, a Painter, in England; his History and particular Talent, 795.
 Sir James Thornhill, his particular Talent, *ib.*
 Site, or Scite, in Painting; what, 746.
 Situation, one of the Categories of Aristotle, in Logick; Definition thereof, 323.
 Sky-rockets, in Pyrotechny; Art of making them, 991, 992.
 Slipped, Term of Heraldry; Signification thereof, 126.
 Slot, in Hunting; Signification thereof, 191.
 Small Pox, in Midwifery; two Kinds thereof, 487.
 — distinct, Symptoms thereof, 487, 488.
 — confluent, Symptom thereof, 488.
 Small Pox divided into four Stages, by Morton, *ibid.*
 — Prognostick thereof, *ibid.*
 — accounted for, by Dr. Drake, *ibid.*
 — De Coetlogon's Sentiment thereupon, 488.
 — Cure thereof, 488, 489.
 — Method of inoculating it, rejected by De Coetlogon, his Reasons for so doing, 490, 491.
 SMITHS, their Art demonstrated, 1062.
 Smith, William, instead of John, a Native of Chichester, an English Face Painter; his particular Talent, 795.
 Snow, in Meteorology; Definition and History thereof, 425.
 Soap, in Soap-making; different Sorts thereof, 1064.
 — hard, Preparation thereof, *ibid.*
 — soft, Preparation thereof, *ibid.*
 SOAP-MAKING, Art thereof, 1064.
 Society, in Law; History thereof, 293.
 SOCIETY, Treatise; different Kinds thereof, 1065.
 — Trading, History thereof, *ibid.*
 — in commendam, History thereof, *ib.*
 — anonymous, History thereof, *ibid.*
 — religious, History thereof, *ibid.*
 — for the Reformation of Manners, History thereof, *ibid.*
 — for propagating the Gospel into foreign Parts; History thereof, *ibid.*
 — for propagating Christian Knowledge, History thereof, *ibid.*
 Sectarians, Hereticks; their History and Errors, 159.
 Seimus Faustus, Heresiarch; his History and Errors, *ibid.*
 Socratic Philosophy, System thereof, 890.
 Solfaing, in Musick; Rules and Use thereof, 541.
 Solidity, in Stereometry; Definition thereof, 1071.
 Solution of right angled spherical Triangles, by the common Rule in Trigonometry, 1164.
 — by a Catholick Rule, *ibid.*
 Sonata, in Musick; Definition and different Sorts thereof, 537.
 Sonata di Chiesa, in Musick; History thereof, *ibid.*
 Sonata di Camera; History thereof, *ibid.*
 Song, in Musick; Definition and Execution thereof, 530.
 Soul, human, in Metaphysick; how defined by St. Augustin, 409.
 — its Knowledge demonstrated, *ibid.*
 — its Immortality, Doctrine thereof, 409, 410.
 Sound, in Musick; Definition and principal Affections thereof, 508.
 — their Distinction, *ibid.*
 Sound, simple; Definition and Doctrine thereof, 508, 509.
 — compound, Definition and Doctrine thereof, 509.
 — smooth, Definition and Doctrine thereof, *ibid.*
 — rough, accounted for by M. Perrault, their Phenomena, *ibid.*
 — harmonious; Definition and Doctrine thereof, *ibid.*
 Sound, their Relations, *ibid.*
 State of Oppression, the Foundation of the Dutch Republick; in Government, 52.
 State of Language, in Grammar; History thereof, 50.
 State of Horse, in Horsemanship; its Qualities, 172.
 Star, in Natural History; Formation thereof, accounted for by M. Beaumont, 501.
 Stars, Hieroglyphick; Explication thereof, 165.
 Spasm, a Disease, in Physick; Causes thereof, 920.
 Spasms, two Kinds thereof, distinguished by Cardan, *ibid.*
 Spasms, accidental; Definition and History thereof, 921.
 — Cynick, Definition and History thereof, *ibid.*
 — their Prognostick and Cure, *ibid.*
 Speaker of the House of Commons of the Parliament of England; his Rank and Office, 49.
 Species impressed in God; Possibility thereof, 24.
 — expressed, Definition thereof, *ibid.*
 Specimen of the English, as spoke in the Year 1385, in Grammar, 81.
 — in the Year 1400, *ibid.*
 — in the Year 1537, *ibid.*
 Speculative Musick, Definition thereof, 507.
 Spelman, his Remarks on the purple Colour, in Heraldry, 108.
 Spencer, an English Poet; his Improvements of the English Tongue, in Grammar, 82.
 Spider, Hieroglyphick; Explication thereof, 167.
 Spinnet, an Instrument of Musick; Description and Use thereof, 533, 534.
 Spondee, the Foot of a Verse, in Poetry; Quantity thereof, 961.
 Spunge, in Gunnery; Description thereof, 87.
 St. Colombe, the charitable French Minister, here mentioned, 1095.
 St. Luke, writes his Gospel; his History, 1056.
 St. Matthew wrote his Gospel in Hebrew; Remarks thereupon, 1049.
 St. Paul, the Apostle of the Nations; his miraculous Conversion, 1048.
 — his Ravishment to the third Heaven, 1052.
 — opposes St. Peter, in the Council of Jerusalem; Remarks thereupon, 1053.
 — preaches at Athens, 1054.
 — appoints Timothy, his Disciple, Bishop of Ephesus, 1055.
 — returns to Rome; Remarks of St. Chrysostom on the Temptation the Apostle complains of, 1056.
 — is taken Prisoner at Jerusalem, 1057.
 — is sent to Cæsar, to whom he had appealed, 1057, 1057.
 St. Philip, preaches in Samaria, 1049.
 St. Peter goes to Rome, Proofs thereof, 1051.
 St. Stephen, Protomartyr, his History, 1047.
 St. Fargeau, Dutchy in France, and by whom erected, 616.
 St. Epiphanius, his Remarks of the Cerinthians, in Heresies, 132.
 — on the Ebionites, 133.
 St. Irenæus, his Remarks on the Gnosticks, in Heresies, 132.
 Stable, in Horsemanship, how best situated, 175.
 Stags, in Heraldry, how blazoned, 113.
 Stale-board, a Tool used in Hat-making, 106.
 Stallion, in Horsemanship; how to be managed, 173.
 Stamper, a Tool used in Hat-making, 106.
 Standard of Gold and Silver, 1062.
 Star, in Heraldry; Blazon thereof, 113.
 STARCH-MAKING, Art thereof, 1071.
 Stars for Sky-rockets, how prepared, 992, 993.
 State of Man, in Jansenism; two Sorts thereof, 225.
 State of the Way; three Sorts thereof, *ibid.*
 — of the Term; two Sorts thereof, *ibid.*
 State of Nature fallen, in Jansenism; Doctrine thereof, 226, 227, 228.
 Statera Romana, in Mechanicks; Description and Use thereof, 375.
 States-General, in Government; History thereof, 52.
 States of Holland, in Government; History thereof, *ibid.*
 Statholder, in the Dutch Government; Antiquity of his Dignity, his Power, 52.
 — Abrogation thereof, 53.
 Statue without Hands, Hieroglyphick; Explication thereof, 161.
 Statue, in Sculpture; how defined by Daviller, 1058.
 Statues, Distinction thereof, 1059.
 — allegorical, Definition thereof, *ibid.*
 — cyratick, Definition thereof, *ibid.*
 — curule, Definition thereof, *ibid.*
 — equestrian, Definition thereof, *ibid.*
 — Greek, Definition thereof, *ibid.*
 — hydraulick, Definition thereof, *ibid.*
 — Pedestrian, Definition and Examples thereof, *ibid.*
 — Persian, Definition thereof, *ibid.*
 — Roman, Definition thereof, *ibid.*
 Statue, in Sculpture; Perfection thereof, 1059, 1060.
 Statute of Henry VIII. relating to the Right of Hunting, 200.
 Steaming-bafon, a Tool used in Hat-making, 106.
 STEREOLOGY; Treatise thereof, 1071.
 Stern-post, in Naval Architecture, Proportions thereof, 577.
 STOCKING-MAKING; Art thereof, 1073.
 Stockings; several Kinds thereof, *ibid.*
 — knit; Process and History thereof, *ibid.*
 — woven; Process, and History thereof, 1074.
 Stoick Philosophy; System thereof, 897, 898.
 Stone to make Glafs with; the best, 2.
 Stone, a Disease, in Physick; Causes thereof, according to Etmuller and De Coetlogon, 935.
 Stone in the Kidneys; Symptoms thereof, *ib.*
 — in the Bladder; Symptoms thereof, *ibid.*
 Stone; Prognostick, and Cure thereof, 935, 936.
 Stones, in Minerals; History thereof, 497.
 — M. Tournefort's Theory on their Origin, and Formation, 498, 499.
 — M. Geoffroy's, 499.
 — both refuted by De Coetlogon; and his own Sentiment thereupon, 498, 499.
 Stones; Division thereof, by Bishop Wilkins, 499.
 — vulgar; their Catalogue and Qualities, *ib.*
 — middle pierced; their Catalogue and Qualities, *ibid.*
 — of an incombustible Nature; their Catalogue, *ibid.*
 — strange Original, *ibid.*
 — precious; Catalogue and Value thereof, *ibid.*
 Strophe, in Poetry; Definition thereof, 973.
 Style, in Rhetorick; Definition thereof, 1010.
 — grammatical; Definition and Doctrine thereof, *ibid.*
 — personal; Definition and Doctrine thereof, *ibid.*
 Styles; three Kinds thereof, *ibid.*
 — sublime; Definition thereof, *ibid.*
 — low or simple; Definition thereof, *ib.*
 — intermediate or equable; Definition thereof, *ibid.*
 — tumid; Definition thereof, 1011.
 — loose; Definition thereof, *ibid.*
 — dry; Definition thereof, *ibid.*
 — asiatick; Definition thereof, *ibid.*
 — laconick; Definition and Examples thereof, *ibid.*
 Subaltern Propositions, in Logick; Doctrine thereof, 329.
 Subcontrary Propositions, in Logick; Doctrine thereof, *ibid.*
 Subjunctive, the fourth Mood in the Conjugation of Verbs, in Grammar; Rules thereof, 71.
 Sublime, in Rhetorick; five Sources thereof, according to Longinus, 1011.
 Subsequent Grace, in Jansenism, Definition and Doctrine thereof, 213, 214.
 Substance, one of the Categories of Aristotle, in Logick; Definition thereof, 323.
 Sufficient Grace, in Jansenism; Definition and Doctrine thereof, 214, 215.
 Suilly, Dutchy in France; when, and by whom erected, 616.
 Sun, Hieroglyphick; Explication thereof, 160.
 Supporters, in Heraldry; History and Blazon thereof, 117.
 Supporters of the Arms of England; Blazon thereof, *ibid.*
 Supporters of the Arms of France; Blazon thereof, *ibid.*
 Supporters, when blazoned, 118.
 Supposition, in Musick; several Kinds thereof, 524.
 — Rules thereof given by M. Brofsart, *ibid.*
 Suppositum, in Metaphysick; Definition and Doctrine thereof, 405.
 Surface, or Face of the Escutcheon, in Heraldry; Blazon thereof, 109.
 Surface, and Solidity of a Prism; how measured in Stereometry, 1071.
 — of a Pyramid; how measured, *ibid.*
 — of a Sphere; how measured, 1071, 1072.
 Surface, and Solidity of a Cube; how determined in Stereometry, 1072.
 Suspension, a Figure, in Rhetorick; Definition and Examples thereof, 1012.
 Swallow, Hieroglyphick; Explication thereof, 165.
 Swan, Hieroglyphick; Explication thereof, *ib.*
 Syllapsis, in Rhetorick; two Kinds thereof, 1014.
 — simple; Definition and Rules thereof, 105.
 Syllapsis,

- Syllæpsis relative, Definition and Rules thereof, *ibid.*
- Syllogisms, in Logick, several Sorts thereof, 338.
- Demonstrative, Definition and Rules thereof, *ibid.*
- Sophistical, Definition and Rules thereof, *ibid.*
- Topical, Definition and Rules thereof, *ibid.*
- Sympathy an Indisposition, in Physick, Definition and Signs thereof, 911.
- Symphony, in Musick, what, 536.
- Symptom, in Physick, Definition thereof, 915.
- of the Cause, Definition thereof, *ibid.*
- of a Symptom, Definition thereof, *ibid.*
- Symptoms of a Disease, in Physick, Knowledge thereof, *ibid.*
- Syncope, a Disease, in Physick, Causes, Symptoms, Prognostick and Cure thereof, 521.
- Syncope, in Grammar, Signification thereof, 76.
- Syncope, in Musick, Doctrine thereof, 523.
- Remarks thereupon, 524.
- Synecdoche, in Rhetorick, three Kinds thereof, 1014.
- Synople, or Vert, a Colour, in Heraldry, Blazon thereof, 108.
- Syntax, in Grammar, how defined by Father Buffier, its Use, 73. Two Kinds thereof, 74.
- Syntax of Government, Definition and Rules thereof, *ibid.*
- Syriack Language, in Grammar, Origin thereof, 78.
- Syrup, in Pharmacy, History, Preparation, Clarification and Consistence thereof, 829.
- of Pinks, Preparation and Virtues thereof, *ibid.*
- of Maiden-Hairs, simple, Preparation and Virtues thereof, *ibid.*
- of Wormwood, simple, Preparation and Virtues thereof, *ibid.*
- composed, Preparation and Virtues thereof, *ibid.*
- of Althæa, or Marshmallows, of Fernel, Preparation and Virtues thereof, 830.
- of Mugwort, Preparation and Virtues thereof, *ibid.*
- of Chicory, Preparation and Virtues thereof, *ibid.*
- of Chicory composed with Rhubarb, Preparation and Virtues thereof, *ibid.*
- of Flowers of Peach-Trees, Preparation and Virtues thereof, *ibid.*
- of Flowers of Peach-Trees, composed, Preparation and Virtues thereof, *ibid.*
- Solutive of Roses, Preparation, Virtues and Doses thereof, *ibid.*
- of Roses composed with Senna and Agarick, Preparation, Virtues, and Doses thereof, 831.
- Cathartick of Buckthorn, Preparation, Virtues and Doses thereof, *ibid.*
- of Doler, Preparation, Virtues and Doses thereof, *ibid.*
- Simple of Fumitory, Preparation, Virtues and Doses thereof, *ibid.*
- composed of Fumitory, Preparation, Virtues and Doses thereof, *ibid.*
- Cathartick magistral, Preparation, Virtues and Doses thereof, *ibid.*
- Astringent for the Dysentery, Preparation, Virtues and Doses thereof, 832.
- Cephalick of Moses Charas, Preparation, Virtues and Doses thereof, *ibid.*
- of Scammony, Preparation, Virtues and Doses thereof, *ibid.* Remarks thereupon, *ib.*
- of Mercurialis, Preparation, Virtues and Doses thereof, *ibid.*
- composed, Preparation, Virtues and Doses thereof, *ibid.*
- of Violets, simple, Preparation and Virtues thereof, *ibid.*
- Solutive, Preparation, Virtues and Doses thereof, *ibid.*
- of Rhubarb, Preparation, Virtues and Doses thereof, *ibid.*
- de Tribus, Preparation, Virtues and Doses thereof, 833.
- of Carthamus, Preparation, Virtues and Doses thereof, *ibid.*
- of Polipody, Preparation, Virtues and Doses thereof, *ibid.*
- Cathartick of Endive, Preparation, Virtues and Doses thereof, *ibid.*
- Lientrick of M. d'Aquin, Preparation, Virtues and Doses thereof, *ibid.*
- of Tobacco, simple, Preparations, Virtues and Doses thereof, *ibid.*
- Syrup of Tobacco, composed, Preparation, Virtues and Doses thereof, *ibid.*
- Emetick and Cathartick, Preparation, Virtues and Doses thereof, *ibid.*
- of Barberries, Preparation and Virtues thereof, 834.
- of Pomegranates, Preparation and Virtues thereof, *ibid.*
- of Quinces, Preparation and Virtues thereof, *ibid.*
- of Lemons, Preparation and Virtues thereof, *ibid.*
- of Mulberries, Preparation and Virtues thereof, *ibid.*
- composed, Preparation, Virtues, and Doses thereof, *ibid.*
- of Tussilage, Preparation and Virtues thereof, *ibid.*
- composed, Preparation and Virtues thereof, *ibid.*
- of Jujubes, Preparation and Virtues thereof, *ibid.*
- of Nenuphar, Preparation, Virtues and Doses thereof, *ibid.*
- of Poppies, simple, Preparation and Virtues thereof, 835.
- of red Poppies, simple, Preparation and Virtues thereof, *ibid.*
- Narcotick of Succin, or yellow Amber, Preparation, Virtues and Doses thereof, *ibid.*
- of Ground-Ivy, Preparation, Virtues and Doses thereof, *ibid.*
- of Hyssop, Preparation, Virtues and Doses thereof, *ibid.*
- of Botany, Preparation, Virtues and Doses thereof, *ibid.*
- of Quinquina, Preparation, Virtues and Doses thereof, *ibid.*
- of Orange-Flowers, Preparation and Virtues thereof, *ibid.*
- of the Juice of Oranges, Preparation and Virtues thereof, 836.
- of Flowers of Borage, Preparation and Virtues thereof, *ibid.*
- of Camomile, Preparation and Virtues thereof, *ibid.*
- of Radishes, Preparation and Virtues thereof, *ibid.*
- of Mint, Preparation and Virtues thereof, *ibid.*
- of Cinnamon, Preparation and Virtues thereof, *ibid.*
- of Carduus Benedictus, Preparation and Virtues thereof, *ibid.*
- of St. Johnwort; Preparation and Virtues thereof, *ibid.*
- of Plantain; Preparation and Virtues thereof, *ibid.*
- Syrup of Scordium, simple; Preparation and Virtues thereof, 837.
- composed; Preparation, Virtues, and Doses thereof, 837.
- Syrup of Kermes; Preparation, Virtues, and Doses thereof, *ibid.*
- System, in Musick; Nature thereof, 510.
- Systems, several Distinctions thereof, *ibid.*
- concinnous; Definition thereof, *ibid.*
- inconcinnous; Definition thereof, *ib.*
- particular; Definition and History thereof, *ibid.*
- universal; Definition and History thereof, *ibid.*
- of Boetius; History and Rules thereof, 510, 511.
- of Pythagoras; History and Rules thereof, 511.
- of Timothy the Milesian; History and Rules thereof, *ibid.*
- of Olympius; History and Rules thereof, *ibid.*
- of Pope Gregory; History and Rules thereof, 512.
- of Guido Aretin; History and Rules thereof, 512, 513.
- Modern, History, Rules and Conveniency thereof, 513, 514.
- of John des Murs; History, Rules, and Conveniency thereof, 514.
- of M. Sauveur; History, Rules, and Conveniency thereof, 515.
- T.
- T**, A Consonant and the nineteenth Letter of the Alphabet, in Grammar, 63.
- Remarks of the Abbot Dangeau thereupon, *ibid.*
- its Signification among the numeral Characters of the Antients, 64.
- T, its Signification in Musick, 541.
- Tabellæ, or Lozenges, or solid Elecduaries, in Pharmacy; Invention thereof, to what Purpose, 848.
- Tabellæ Diachartami; Preparation, Virtues, and Doses thereof, 848, 849.
- reformed; Preparation, Virtues, and Doses thereof, 849.
- Tabellæ diatrypethi cum rhæo; Preparation, Virtues, and Doses thereof, *ibid.*
- Purpantes Jacobi le Mort; Preparation, Virtues, and Doses thereof, *ibid.*
- contra vermes, or against Worms; Preparation, Virtues, and Doses thereof, *ib.*
- cachecticæ ant. d'Aquin; Preparation, Virtues, and Doses thereof, *ibid.*
- de croco martis simplices; Preparation, Virtues, and Doses thereof, 849, 850.
- de croco martis compositæ; Preparation, Virtues, and Doses thereof, 850.
- emetick; Preparation, Virtues, and Doses thereof, *ibid.*
- mercuriales; Preparation, Virtues, and Doses thereof, *ibid.*
- pectorales; Preparation, Virtues, and Doses thereof, *ibid.*
- de althæa simplices, Preparation, Virtues, and Doses thereof, *ibid.*
- de althæa compositæ; Preparation, Virtues, and Doses thereof, *ibid.*
- diafulphuris; Preparation, Virtues, and Doses thereof, *ibid.*
- pectorales citrina; Preparation, Virtues, and Doses thereof, *ibid.*
- magnanimitatis; Preparation, Virtues, and Doses thereof, 857.
- Cardiacæ; Preparation, Virtues, and Doses thereof, *ibid.*
- Lithontriptricæ fernelii reformatæ; Preparation, Virtues, and Doses thereof, *ib.*
- Roborantes; Preparation, Virtues, and Doses thereof, *ibid.*
- Mithridaticæ preservantes; Preparation, Virtues, and Doses thereof, *ibid.*
- Catarrhales calidæ; Preparation, Virtues, and Doses thereof, *ibid.*
- Catarrhales frigide; Preparation, Virtues, and Doses thereof, *ibid.*
- Tablatura, Term of Musick; its Signification, how marked, 542.
- Tablature of the Lute, in Musick; how marked, *ibid.*
- Table-Glaffes, how blown, in Glas-making, 4.
- how many annealed at a Time, *ib.*
- Table of the Weight, Length, of the Balls, and Caliber of Brass Cannons, as they obtained antiently; in Gunnery, 84.
- as they obtain in England, *ibid.*
- Tables of the Caliber of the different Pieces of Ordnance in Gunnery, 86, 87.
- Tables of the Randoms of the different Pieces of Ordnance, 88.
- of the modern French Pieces, as recorded by M. Du Metz, *ibid.*
- Tables of the different Chafes of Mortars, as calculated by those who have followed the Rules of M. Blondel, in Gunnery, 91.
- for Mortars of 12 Inches Caliber, *ibid.*
- for Mortars of 8 Inches Caliber, 92.
- Tables to find, at a Medium, the Depth of the Rain that falls yearly; in Meteorology, 424.
- Tables of the fifteen diatonick Chords of the System of the Antients, in Musick; Explication thereof, 511.
- Table of the authentick and plagal Tones, in Musick; Remarks thereupon, 518.
- Table of Concords, in Musick, 524.
- another of Concords, 527.
- Table of simple Harmonies, in Musick, 526.
- of Proportions, in Musick, 541.
- Table of the Weight of Cables of a hundred Fathoms; in Naval Architecture, 572.
- of the Thickness of the Threads, and of the Weight of the Cables, 575.
- of the Thickness of the Cable, in Proportion to the Weight of the Anchor, 576.
- Table of the Length and Breadth of some Ships; and of the Length and Thickness of the Masts, and of their Tacklings, 572, 573.
- of the Proportions which the English observe in the Construction of their Ships, 576, 577.
- Table of Reduction of the Minutes of each Parallel into Leagues, and geometrical Paces, in Navigation, 591.
- Table of Proportions for the Construction of astronomical Telescopes, in Opticks, 651.
- Tables, astronomical, 1210.
- of Equation of Days, *ibid.*
- of the mean Motion of the Earth, of the Place of the Perihelion, &c. 1211.
- of the mean Motion of the Earth for every Day of the Year, *ibid.*
- of the horary mean Motion of the Earth, 1213.
- Tables

- of the mean Motion of the Moon, and of the Apogæum of the Node, *ibid.*
- of the mean Motions of the Moon for every Day of the Year, 1214.
- of the mean Motions of the Moon, by Hours, and Parts of an Hour, 1216.
- of Equations of the Center of the Moon, 1217.
- of Variation, 1218.
- of Equation of the Node, &c. *ibid.*
- of the simple Latitude of the Moon, *ib.*
- of Reduction appropriated to the lesser Inclination of the Orbit, &c. *ibid.*
- of the horary Motion of the Moon in the Eclipses, 1219.
- of the horizontal Parallax, &c. *ibid.*
- of the Angle which the true Motion of the Moon, from the Sun, forms with the Ecliptick in the Syzgies, *ibid.*
- of the temporary Reduction between the true Syzgies, &c. *ibid.*
- of the mean Motion of the Moon from the Sun, 1220.
- of the mean Motion of Saturn's Satellites, &c. *ibid.*
- of the Revolutions of the first Satellites of Jupiter in a Year, 1221.
- of the first Satellites at Jupiter's Shadow, in the Meridian of London, *ibid.*
- of the first Equation of the Conjunctions of the first Satellites of Jupiter, 1222.
- of the second Equation of the first Satellites of Jupiter, *ibid.*
- of the half Stay of the first Satellites in the Shadow of Jupiter, 1223.
- of the mean Motion of Saturn from the Aphelion, *ibid.*
- of the Heliocentrick Place of Saturn, 1222, 1223.
- of the mean Motion of Jupiter from the Aphelion, 1226.
- of the heliocentrick Place of Jupiter, 1227.
- of the mean Motion of Mars from the Aphelion, 1230.
- of the heliocentrick Place of Mars, 1230, 1231.
- of the mean Motion of Venus from the Aphelion, 1233.
- of the heliocentrick Place of Venus, 1234.
- of the mean Motion of Mercury from the Aphelion, 1237.
- of the heliocentrick Place of Mercury, 1237, 1238.
- Tadco di Gaddo Gaddi, a Painter of the Roman School, his History and particular Talent, 759.
- Tailé, French Term of Heraldry, Signification thereof, 126.
- Tan, in Tanning, what, how prepared, 1082.
- Tangent, in Trigonometry, Definition and Division thereof, 1162.
- of the Complement, Definition thereof, *ibid.*
- Artificial, Definition thereof, *ibid.*
- of a Conic Section, Definition thereof, *ibid.*
- Tangents, Method thereof, 1162, 1163.
- Tartarians, their Letters, in Grammar, 55.
- Teeth of Children, in Midwifry, when they most commonly begin to appear, how bred, how cut, Method of helping them, 484, 485.
- De Coetlogon's Remarks on the Virtues of the Anodyne Necklace, *ibid.*
- Teints, what, in Painting, 753.
- Telescope, in Opticks, Composition thereof, 648.
- when first invented, 652.
- different Kinds thereof, 648.
- Galilean, or Dutch, how made, 648, 649.
- Use and Theory thereof, 650.
- Astronomical, Construction and Theory thereof, 650.
- Huggen's great, Construction and Theory thereof, 650, 651.
- Land, or Day, Construction, Use and Theory thereof, 651, 652.
- Binocular, Description thereof, 651.
- Tellers of the Exchequer, in Law, their Office, 307.
- Temperament, in Musick, Signification, Rules and History thereof, 542.
- of the Lute, in Musick, how effected, 531.
- Tenne, Tenny, or Tawny, a Colour, in Heraldry, Blazon thereof, 108.
- Tenor, in Musick, Definition thereof, how marked, 529.
- two Kinds thereof, distinguished by the Italians, *ibid.*
- Concertante, Distinction and Rules thereof, *ibid.*
- Tenor counter, Definition thereof, *ibid.*
- Tense in the Conjugation of Verbs, in Grammar, Definition thereof, 72.
- simple, their Number, *ibid.*
- Present, Rules and Examples thereof, *ibid.*
- Preter, Rules and Examples thereof, *ib.*
- Future, Rules and Examples thereof, *ib.*
- Compound, Rules and Examples thereof, *ibid.*
- how denoted in the Greek and Latin, *ib.*
- of the oriental Languages, *ibid.*
- Term of the Beatifick Vision in God and his Attributes, Doctrine thereof, 24.
- Terms used, in Hunting, for Beasts of Venery and Chace, as they are in Company, 186.
- to express their Dislodging, *ibid.*
- for their Copulation, *ibid.*
- for the Footing and Treading, *ibid.*
- for the Attire of Deer, *ibid.*
- for Flaying, Stripping, and Casing all Manner of Chases, 187.
- in Law, Number and History thereof, 319.
- opposite, in Logic, four Sorts thereof, 341.
- Ternary or Triple, Measures, in Musick, Definition and History thereof, 520.
- Terra Sigillata, in Minerals, where found, its supposed Virtues, 500.
- Terrier, or Harrier, a Kind of hunting Hounds, their Qualities, 188.
- Testament, in Law, Definition thereof, 288.
- several Sorts of them, *ibid.*
- Nuncupative among the Romans, Definition and History thereof, *ibid.*
- Holographical, how consider'd by the French Legislators, *ibid.*
- how put in Force among the English, 288, 289.
- Testudo, a Machine of War among the Antients, Description and History thereof, 106.
- Teutonic Language, in Grammar, History thereof, 82.
- Theocracy, in Government, its Antiquity, its Maxims at the Beginning of the World, as supposed by De Coetlogon, 37, 38.
- among the Hebrews, according to the same, 40, 41.
- Theodolite, an Instrument used in Surveying, Description and Use thereof, 1076.
- THEOLOGY, Definition and Division thereof, 1083.
- Positive, Definition thereof, *ibid.*
- Scholastick, Definition thereof, *ibid.*
- Speculative, Definition thereof, *ibid.*
- Polemical, Definition thereof, *ibid.*
- Theological Arguments, in Theology, whence deduced, 1084.
- Theorbo, an Instrument of Musick, Description, History, and Use thereof, 531.
- Theraphim, in Religion, History thereof, 1007.
- Theriaca Andromachi, in Pharmacy, Preparation, Virtues, Doses, and History thereof, 852.
- Theriaca Reformata, Preparation, Virtues and Doses thereof, 853.
- Theriaca Diatesaron, Mesue, Preparation, Virtues and Doses thereof, *ibid.*
- Thermometer, in Pneumatick, various Kinds thereof, 953.
- depending on the Rarefaction of the Air, Construction and Theory thereof, *ibid.*
- Mercurial, Construction and Theory thereof, *ibid.*
- Florentine, common, Construction thereof, *ibid.*
- Theory and Defects thereof, 954.
- Thomas Gietino, a Painter of the Roman School, his History and particular Talent, 759.
- Thorough-bass, in Musick, Definition and Use thereof, Remarks of M. Brossart thereupon, *ibid.*
- Thunder, an igneous Meteor, in Meteorology, Theory thereof, according to Des Cartes, Newton, Wallis, and De Coetlogon, 418, 419.
- its Phenomena accounted for by De Coetlogon, according to his own Hypothesis, 419.
- Thunder-bolt, Definition, and History thereof, *ibid.*
- Tides, in Meteorology, Theory thereof, as deduced from the Newtonian Principles, by Dr. Halley, 430, 431.
- Tierce, French Term of Heraldry, Signification thereof, 126.
- Timanthe, a celebrated Painter among the Antients; his History and particular Talent, 759.
- Timbré, French Term of Heraldry, Signification thereof, 126.
- Time, in Musick, Signification and Division thereof, 519.
- perfect, how marked, *ibid.*
- imperfect, how marked, *ibid.*
- Maggiore, how marked, *ibid.*
- Minore, how marked, *ibid.*
- di Buono, Definition, and Rules thereof, *ibid.*
- di Cativo, Definition and Rules thereof, *ibid.*
- Titian Vetelli, a Painter of the Venetian School, his History and particular Talent, 770.
- Remarks on his Works, 771.
- Tizane, in Pharmacy, several Sorts thereof, 812.
- Aperitive, Preparation and Virtues thereof, *ibid.*
- astringent, Preparation and Virtues thereof, *ibid.*
- Tones, eight of them, in the Gregorian System, commonly called plain Chant, in Musick, 517.
- authentick, in the plain Chant, how formed, 517, 518.
- Plagal, how formed, 518.
- in Musick, taken for one of its Intervals, two Sorts thereof, *ibid.*
- Major, Definition and Rules thereof, *ibid.*
- Minor, Definition and Rules thereof, *ibid.*
- Remarks thereupon, *ibid.*
- Tongue, Hieroglyphick, Explication thereof, 161.
- Mother, in Grammar, their Number in the East and West, 77.
- Torce, French Term of Heraldry, Signification thereof, 126.
- Torch, or Flambeau, Hieroglyphick, Explication thereof, 168.
- TORIES, a formidable Party in England, their History, 1120, 1121.
- Remarks thereupon by De Coetlogon, 1121.
- Torpedo, in the natural History, Description thereof, Effects produced by touching it, or accounted for by the Antients, Perrault, Redi, Borelli, and Reaumur, 557.
- its Mechanism, 557, 558.
- Tortaux, Pieces of Heraldry, Blazon thereof, 126.
- Tortoise, Hieroglyphick, Explication thereof, 166.
- Towers of Wood, Machines of War used among the Antients, Description and Use thereof, 106.
- Traditions, in Theology, several Kinds thereof, 1100.
- of the Old Testament, their Authority, *ibid.*
- of the New, several Kinds thereof, 1101.
- Apostolical, their Authority, Proofs thereof, 1101, 1102.
- Ecclesiastical, their Authority, Proofs thereof, 1102, 1103.
- Objections against them, 1103, 1104.
- Tragedy, in Poetry, what in its Origin, according to M. Dacier, 966.
- what according to Hedeling, 967.
- Faults found in those of Euripides, *ib.*
- how defined by Aristotle, Remarks of Corneille thereupon, *ibid.*
- modern, several Parts thereof, *ibid.*
- Rules given by Boileau, 969.
- Trouché, Term of Heraldry, Signification thereof, 126.
- Transfiguration of Christ, in Incarnation, Proofs thereof, 254.
- Transposition, in Musick, two Kinds thereof, 542.
- with Respect to the Cleft, Definition, Rules and Use thereof, *ibid.*
- from one Key to another, Rules and Use thereof, *ibid.*
- Transposition of both Kinds, Use thereof, and Remarks thereupon, *ibid.*
- TRAVELLING, Maxims thereof, as established by De Coetlogon, 1224, 1225.
- TREATIES, how to be negotiated, according to De Coetlogon's new Maxims, 1136, 1137.
- different Sorts thereof, 1137.
- of Peace concluded at Westminster between the King of Great Britain Charles II. and the States General, 1138, 1139.
- De Coetlogon's Remarks thereupon, 1139, 1140.
- concluded between the King of France and the States General, 1141.
- De Coetlogon's Remarks thereupon, *ibid.*

- Treaty of Pifa, between the King of France and the Pope, 1141, 1142, 1143.
 — De Coetlogon's Remarks thereupon, 1143.
 — Treaty between the King of Spain, and the French Calvinists, 1144.
 — De Coetlogon's Remarks thereupon, 1145.
 Treaty of Munster, 1145.
 — De Coetlogon's Remarks thereupon, 1155.
 Treble, in Musick; Rules and Division thereof, 529.
 Trefoil, an Ordinary, in Heraldry, Blazon thereof, 113.
 Treillé, French Term of Heraldry, Signification thereof, 126.
 Tremolo, in Musick, Signification thereof, 543.
 Triad, in Musick, Definition, Rules and Use thereof, *ibid.*
 Trias, Term of Musick, Signification thereof, *ibid.*
 Tribach, a Foot, in Poetry, Rules thereof, 961.
 Trident, Hieroglyphick, Explication thereof, 168.
 Trifera, in Pharmacy; Preparation and Virtues thereof, 855.
 TRIGONOMETRY, Definition and Division thereof, 1162.
 — plain, Doctrine thereof, 1163.
 — spherical, Doctrine thereof, 1163, 1164.
 Trigonometry; Utility thereof, 1166.
 Trillo, in Musick; how marked, 543.
 TRINITY; Treatise thereof, 1167, 1168.
 Trinitarians, a religious Order, their History, 673.
 Trio, in Musick; Definition and Rules thereof, 543.
 Triples, simple, in Musick; five Kinds thereof, 520.
 — grand or maggiore; Doctrine thereof, how marked, both by the Antients and Moderns, 520, 521.
 — minore, Doctrine thereof; how marked both by the Antients and Moderns, 521.
 — picciola, or small; Doctrine thereof, how marked both by the Antients and Moderns, *ibid.*
 — crometta, or of Crotchets; Doctrine thereof, how marked both by the Antients and Moderns, *ibid.*
 — semi-crometta, or of double Crotchets; Doctrine thereof, how marked, *ibid.*
 Triples composed; three Sorts thereof, 521.
 — di semi-minima; how marked, *ibid.*
 — di crome, Doctrine thereof; how marked, *ibid.*
 — di semi-crome, Doctrine thereof; how marked, 521, 522.
 Triples mixt; Doctrine thereof, 522.
 Triples at two Times; Doctrine thereof, *ibid.*
 — at four Times; Doctrine thereof, *ib.*
 Tripping, Term of Heraldry; Signification thereof, 126.
 Tritheites, Hereticks; their History and Errors, 154.
 Tritis, Term of Forest; Signification thereof, 190.
 Triton, in Mythology; History thereof, 552, 553.
 Tritone, in Musick; Rules thereof, 531.
 Troches, in Pharmacy; Etymology, and History thereof, 841.
 Troches of Alhandal; Preparation, Virtues, and Doses thereof, *ibid.*
 Troches of Agarick; Preparation, Virtues, and Doses thereof, 842.
 Troches of Rhubarb; Preparation, Virtues, and Doses thereof, *ibid.*
 Troches of Alkekengi; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Ramich; Preparation, Virtues, and Doses thereof, *ibid.*
 — against the Plague; Preparation, Virtues, and Doses thereof, *ibid.*
 Troches, gallice mofcator; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Camphire; Preparation, Virtues, and Doses thereof, *ibid.*
 — hyfterick; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Myrrh; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Barberies; Preparation, Virtues, and Doses thereof, *ibid.*
 — Narcotick; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Karabe; Preparation, Virtues, and Doses thereof, 842, 843.
 Troches of Gordon reformed; Preparation, Virtues, and Doses thereof, 843.
 — for a Gonorrhæa; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Asthma; Preparation, Virtues, and Doses thereof, *ibid.*
 — Bechick; Preparation, Virtues, and Doses thereof, *ibid.*
 — red Bechick; Preparation, Virtues, and Doses thereof, *ibid.*
 — Anodine; Preparation, Virtues, and Doses thereof, *ibid.*
 — to stop the vomiting of Blood; Preparation, Virtues, and Doses thereof, *ibid.*
 — to stop the immoderate Flux of the Piles; Preparation, Virtues, and Doses thereof, *ibid.*
 — for a Diarrhæa; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Diabetes; Preparation, Virtues, and Doses thereof, *ibid.*
 — for the Pleurisy; Preparation, Virtues, and Doses thereof, *ibid.*
 — of Kermes; Preparation, Virtues, and Doses thereof, 843, 844.
 Trumpet, Hieroglyphick; Explication thereof, 168.
 Trumpet, an Instrument of Musick; Description and Use thereof, 534.
 Trumpet-marine, an Instrument of Musick; Description and Use thereof, 532.
 Trunked, Term of Heraldry; Signification thereof, 126.
 Trunque, French Term of Heraldry; Signification thereof, 126.
 Turcoife, or Turquoise, in Lapidary; two Kinds thereof, 274.
 — oriental; Beauty and Value thereof, *ibid.*
 — occidental; Value, and History thereof, *ibid.*
 Turks, three Kinds of Marriage among them in Law, 285.
 Turkish Government; History thereof, 42, 43.
 TURNING; Art thereof, 1187.
 Turpentine, Preparation thereof; in Pharmacy, 823.
 Tutorage, in Law; Definition, Doctrine, and History thereof, 285.
 Tymbal, an Instrument of Musick; Description and Use thereof, 536.
 Types, in Printing; their different Names, according to their Sizes, 985.
 Tyranny, or despotick Power, in Government; its Origin according to De Coetlogon, 38, 39.
- U.
- U, in Grammar, the fifth Vowel of the twentieth Letter of the Alphabet; how pronounced by the English, French, &c. 63.
 — its Signification among the numeral Characters of the Antients, 64.
 V, in Musick; Signification thereof, 543.
 Vacuum, in Philosophy; two Kinds thereof distinguished by the Antients, 906.
 Vacuum coaceruatum; Definition and Doctrine thereof, *ibid.*
 — rejected by the later Philosophers, and particularly by the Cartesians, *ibid.*
 Vacuum diffeminatum; rejected by the Peripateticks, *ibid.*
 Vacuum; not only its Existence, but even its Possibility denied by Des Cartes, and De Coetlogon, *ibid.*
 — its Existence asserted by Sir Isaac Newton, 907, 908.
 Vair, in Heraldry; Origin, Description, and Blazon thereof, 114.
 — Colombier's Remarks thereupon, *ibid.*
 Vairy, Term of Heraldry; Signification thereof, *ibid.*
 Valentin, Heresiarch; his History and Errors, 133.
 Valentinois, Dutchy in France; when, and by whom erected, 616.
 Van Dale, a Dutch Physician; his Sentiment on Oracles, 365.
 Van-Helmout; his Experiments on Glass, in Glass-making, 1.
 Varieties in the Application of the Ballance, in Mechanicks, 375.
 Varnish, in Japanning; how prepared and applied, 233.
 Veil, Hieroglyphick; how represented on antique Medals, and to what Purpose, 167.
 Vellum, in Paper-making; Description thereof, 801.
 Velvet, in Weaving; how wove, its best Manufactures; several Kinds thereof, 1206.
 — figured; Description thereof, *ibid.*
 — ramaged or branched; Description thereof, *ibid.*
 — shorn; Description thereof, *ibid.*
 — striped; Description thereof, *ibid.*
 Venereal Disease, how cured in a Woman with Child, in Midwifry, 447.
 Venetian Taste, in Painting; Remarks thereupon, 795, 796.
 Ventadour, Dutchy in France; when, and by whom erected, 616.
 Verb, in Grammar; Definition thereof, 70.
 Verbs, their Origin and Office; how distinguished from Nouns, their Use, how defined by Aristotle, Buxtorf, and Scaliger, *ib.*
 Verbs, variously divided, 71.
 — active; three Kinds thereof, *ibid.*
 — passive; Definition and Doctrine thereof, *ibid.*
 — Substantive; Definition and Doctrine thereof, *ibid.*
 — auxiliary; Definition and Doctrine thereof, *ibid.*
 — regular; Definition and Rules thereof, *ib.*
 — irregular; Definition and Rules thereof, *ibid.*
 — impersonal; Definition and Rules thereof, *ibid.*
 Verneville, Dutchy, in France; when, and by whom erected, *ibid.*
 Verse, in Poetry; Definition thereof, 960.
 Verses; their various Kinds and Denominations, *ibid.*
 — Hexameter; two Kinds thereof, how composed, *ibid.*
 — heroick English; how composed, *ib.*
 — Pentameter; Definition and Rules thereof, *ibid.*
 — iambic; Definition, Distinction, Rules and Examples thereof, 961, 962.
 — saphick; Definition, Rules, and Examples thereof, 962.
 — adonick; Definition and Examples thereof, *ibid.*
 Vertigo, a Disease in Physick; Causes, and Cure thereof, 921.
 Vessels used in Pharmacy, 887.
 Viboar, in Naval Architecture; Description thereof, 579.
 Vices opposed to Charity, in Theology, 1096, 1097.
 Victory, in Painting; how painted, 752.
 Villars, Dutchy in France; when, and by whom erected, 616.
 Villeroy, Dutchy in France; when, and by whom erected, 617.
 Vine, Hieroglyphick; Signification thereof, 169.
 Viola, an Instrument of Musick; Description and Use thereof, 532.
 Violin, an Instrument of Musick; Description thereof, *ibid.*
 — how denoted in Compositions of Musick, *ibid.*
 — how play'd upon; what Cleff used to note the Musick for the Violin, *ibid.*
 Violoncello, an Instrument of Musick; Description and Use thereof, *ibid.*
 Viols; various Kinds thereof, *ibid.*
 — Bass; Description thereof, *ibid.*
 — Alto; Description thereof, *ibid.*
 — D'Amore; Description and Use thereof, *ibid.*
 — large; Description and Use thereof, *ib.*
 — Baltarda; Description and Use thereof, *ib.*
 — de Braccio; Description and Use thereof, 532.
 — Prima; Description and Use thereof, *ib.*
 — Secunda; Description and Use thereof, *ibid.*
 — Terza; Description and Use thereof, *ib.*
 — Quarta; Description and Use thereof, *ib.*
 Violetta; Description and Use thereof, *ibid.*
 Viper, Hieroglyphick; how represented by the Egyptian Priests, and to what Purpose, 164.
 — how on a Medal of the Empress Julia Mammæa, *ibid.*
 Vipers, in Pharmacy; Preparation thereof, 823.
 Virtue, in Painting; how painted, 752.
 Viscount, in England; his Privileges, 620.
 Viscount's eldest Sons, their Rank in England, 622.
 Visible Mission, in the Trinity; Doctrine thereof, 1180.
 Vision, beatifick, in God and his Attributes; Definition thereof, 20.
 — clear and intuitive, its Possibility; how proved, 20, 21.
 — Its Existence; how proved, 22.
 — Its Objects; Proofs thereof, 23.
 — Its Equality and Unequality; Proofs thereof, 26.
 Vision, in Opticks; several different Systems thereof, 634.
 — of the Platonicks and Stoicks; how proved, *ibid.*
 — of the Epicureans; Proofs thereof, *ibid.*
 — of Aristotle, deliver'd in his Chapter De aspectu, *ibid.*
- Vision

- Vision of the *Peripateticks* improved, *ibid.*
 — of the *Cartesians* and *Newtonians*, supported by Demonstrations, 634, 635.
 Vision, Laws thereof, with regard to the Figures of visible Objects, 637.
 — with Regard to the Motion of the Viscibles, 637, 638.
Vistation, a religious Congregation of Nuns, in Orders; History thereof, 676.
 Vitriol, in Minerals; how defined by Boerhaave; different Sorts thereof, 494.
 — Roman, whence brought, its Colour; how made, *ibid.*
 — white; its Qualities, *ibid.*
 — what they consist of, according to *Geoffroy* and *Boerhaave*, *ibid.*
 Vitriol, native; History thereof, *ibid.*
 — green; its Qualities and Virtues, *ibid.*
 Vitreous Humour of the Eyes, in Opticks, Description and Use thereof, 625.
 Undé, Term of Heraldry; Signification thereof, 126.
 Unguent, in Pharmacy; Etymology and Uses thereof, 876.
Unguentum of Roses; Preparation and Virtues thereof, *ibid.*
 — *Populeum*; Preparation and Virtues thereof, *ibid.*
 — Remarks thereupon, *ibid.*
Unguentum album; Preparation and Virtues thereof, *ibid.*
 — *Pampholigos*; Preparation and Virtues thereof, *ibid.*
 — *Defecativum rubrum*; Preparation and Virtues thereof, 876, 877.
 — *Basilicum*; Preparation and Virtues thereof, 877.
 — Remarks thereupon, *ibid.*
Unguentum Apophlorum; Preparation and Virtues thereof, *ibid.*
 — *Mondificativum de Apio*; Preparation and Virtues thereof, *ibid.*
 — *Mondificativum de resina*; Preparation and Virtues thereof, *ibid.*
 — *Mondificativum Nic. P. Emery*; Preparation and Virtues thereof, *ibid.*
 — *Aegyptiacum*; Preparation and Virtues thereof, *ibid.*
 — *de Althaea reformatum*; Preparation and Virtues thereof, *ibid.*
Unguentum aurum; Preparation and Virtues thereof, 878.
 — *Neapolitanum simplex*; Preparation and Virtues thereof, *ibid.*
 — *Neapolitanum quadruplicatum mercutio*; Preparation and Virtues thereof, *ibid.*
 — *Emulatum*; Preparation and Virtues thereof, *ibid.*
 — *Nicotianum*; Preparation and Virtues thereof, *ibid.*
 — *de Tutbia*; Preparation and Virtues thereof, *ibid.*
 — *Oxyboricum*; Preparation and Virtues thereof, *ibid.*
 — *Pomatum officinale*; Preparation and Virtues thereof, *ibid.*
 — *Asippa*; Preparation and Virtues thereof, 879.
 — *Stypticum*; Preparation and Virtues thereof, *ibid.*
 — *de Stercor*; Preparation and Virtues thereof, *ibid.*
 — *Defensivum*; Preparation and Virtues thereof, *ibid.*
 — *contra Vermes*; Preparation and Virtues thereof, *ibid.*
 — *de rapis pro Pernionibus*; Preparation and Virtues thereof, *ibid.*
 — *Nervinum*; Preparation and Virtues thereof, *ibid.*
 — *Indolium ad Hemorrhoides*; Preparation and Virtues thereof, *ibid.*
Unguentum de Balsam; Preparation and Virtues thereof, *ibid.*
Unguentum de Cacao; Preparation and Virtues thereof, *ibid.*
 — *de Cacao citra*; Preparation and Virtues thereof, *ibid.*
 — *ad Constrictas in meatu Urinario natas*; Preparation and Virtues thereof, 880.
 — *ad parietum hum partum*; Preparation and Virtues thereof, *ibid.*
 — *fulvum Nicotini*; Preparation and Virtues thereof, *ibid.*
 — *de Trochiscis*; Preparation and Virtues thereof, *ibid.*
 — *Terebinthina*; Preparation and Virtues thereof, *ibid.*
 — *Terebinthina*; Preparation and Virtues thereof, *ibid.*
 Unguent to make the Hairs grow; Preparation and Virtues thereof, *ibid.*
 Unisonance, in Musick; Definition and Rules thereof, 526.
 Unity of God; Definition thereof, 19.
 — affirmative; Doctrine thereof, *ibid.*
 — numerical; Doctrine thereof, *ibid.*
 Unity of the dramatick Action, in Poetry; in what it consists, 966.
 Unity of Time; Laws thereof, *ibid.*
 — of Place and Scene; Rules thereof, *ibid.*
 — of Character; Rules thereof, *ibid.*
 Universal Judgment, in Incarnation; Doctrine thereof, 263, 264.
 UNIVERSITY, Definition thereof, 1188.
 Universities, why thus called; the most famous in Europe, *ibid.*
 University of Paris, when founded, and by whom; its several Faculties, Exercises, Governors, Professors, Privileges, *ibid.*
 — Its Colleges, their Foundation, Exercises, Privileges, Immunities, Revenues, 1188, 1189.
 University of Montpellier, in France; when, and by whom founded; its Excellence in the Faculty of Medicine, 1190.
 University of Orleans, in France; when, and by whom founded; very beneficial to Foreigners, *ibid.*
 University of Angers, when, and by whom founded, *ibid.*
 University of Oxford, the second in Europe; when, and by whom founded; its Government, Privileges, Immunities, Exercises, Colleges, sumptuous Buildings, 1190, 1191, 1192.
 University of Cambridge, when, and by whom founded; its Government, Exercises, Privileges, Colleges, Buildings, Revenues, 1192.
 University of St Andrew, in Scotland; when, and by whom founded; the Number of its Colleges, their Exercises, Government, Privileges, Revenues, Buildings, &c. 1197.
 University of Glasgow, in Scotland; when, and by whom founded; and the rest of its History, 1197, 1198.
 University of Aberdeen, in Scotland; when, and by whom founded, and the rest of its History, 1198, 1199.
 University of Edinburgh, in Scotland; when, and by whom founded, and the rest of its History, 1199, 1200.
 Vocal Musick; Definition, History, and Rules thereof, 529, 530.
 Voice, in Musick; Definition and Division thereof, 530.
 — shrill; by whom performed, *ibid.*
 — mediate; Rules thereof, *ibid.*
 — deep; Rules thereof, *ibid.*
 Voice, in Rhetorick; Advantages thereof, 1017.
 Voided, Term of Heraldry; Signification thereof, 126.
 Volant, Term of Heraldry; Signification thereof, 126.
 Vomiting of a pregnant Woman, in Midwifry; Prognostick thereof, 442.
Fossius, his Sentiment on the Origin of the Cophtic Language, 79.
 Vowel, in Grammar; Definition, Distinction, and History thereof, 57.
 Vows monastick; their Origin, Number, Solemnity; Abuses committed in them; De Coetlogon's Remarks thereupon, 677.
 Urania, in Painting; how painted, 752.
 Urbane Servitude, in Law; what, 287.
 Urbane Building, in Law, *ibid.*
 Urbane Services, in Law; Doctrine thereof, *ibid.*
 Usage; its Utility in a Language, 76.
 — how defined by Vaugelas, *ibid.*
 Use, and Habitation, in Law; Doctrine thereof, 287.
 Use, in Law; Signification thereof, *ibid.*
 Uses, when invented in England, *ibid.*
Uzès, Duchy in France; when, and by whom erected, 616.
 Use, in Musick; Signification, and Doctrine thereof, 543, 544.
 Usucaption, in Law; Definition thereof, 287.
 Usucaptions; Doctrine thereof, *ibid.*
 Usufruit, in Law; Definition and Doctrine thereof, *ibid.*
 Usufactory, who, and his Right, *ibid.*
 Utensils of the Glass-Houses, in Glass-making, 3, 5.
 Utensils used in Pharmacy, various Kinds thereof, 887.
 Vulcan, in Painting, how painted, 751.
 Vulnary Herbs, in Pharmacy, their Names and Number, 809.
 Vulture, Hieroglyphick, how used by the Egyptian Priests, 164.
 W, in the English, usually a Consonant, and sometimes a Vowel, how pronounced, *ibid.*
 W. W. W. used in Musick, to what Purpose, 533.
 Wad, in Gunnery, Use thereof, 89.
 Wad-Screw, in Gunnery, Description and Use thereof, 87.
Waldo, a Dogmatist, his History and Dogma's, 158.
Waldenses, a Sect, in Heresies, their History, *ibid.*
 Walking, incessus, in Rhetorick, Rules thereof, 1018.
Wallis, Dr. his Sentiment on the Origin and Etymology of many English Words, in Grammar, 81.
Walter Lollard, Heretick, his Errors, 158.
 War, Definition and Distinction thereof, in Theology, 1098.
 — offensive, Definition and Doctrine thereof, 1098, 1099.
 — defensive, Definition and Doctrine thereof, *ibid.*
 — when lawful and just, 1099.
 — in whom resides the lawful Authority to declare it, *ibid.*
 — Whether that Authority resides in Ecclesiasticks, De Coetlogon's Sentiment thereupon, *ibid.*
 — Whether it be lawful to make Use of Ambushes in War, 1100.
 Washing Rags for the Paper-mill, in Paper-making, Process thereof, 796.
 Water-Camblots, Description thereof, in Weaving 1202.
 Waters, in which the Child swims in the Matrice, their Origin and Uses, 451.
 — must be left to break of themselves, in the Delivery, when well prepared and formed, 453.
 — of the mineral Springs of the City of Bath in Somersetshire, their Qualities and Virtues, 502.
 — Dr. Astruc's Remarks thereupon, *ibid.*
 — of the Mineral Springs of Bourbon Lancy in France, their Qualities and Virtues, 503.
 — of Bourbon L'Archambault, their Qualities and Virtues, 503, 504.
 — of the mineral Springs of Spaw, their Qualities founded on Experiments made in the Royal Academy of the Sciences at Paris, 505.
 — Mineral, Remarks thereupon, 506.
 — Observations made on their divers Weights and Consistences, 507.
 — distilled, in Pharmacy, Process thereof, 858.
 — distilled, their Division, *ibid.*
 — simple, Definition thereof, *ibid.*
 — composed, Definition thereof, *ibid.*
 — of Plantain, Distillation and Virtues thereof, *ibid.*
 — of Sorrel, Distillation and Virtues thereof, *ibid.*
 — of Wormwood, Distillation and Virtues thereof, 859.
 — of Roses, Distillation and Virtues thereof, *ibid.*
 — of Strawberry, Distillation and Virtues thereof, *ibid.*
 — of Walnuts, Distillation and Virtues thereof, 859, 860.
 — of Cow-dung, Distillation and Virtues thereof, 860.
 — of a Thousand Flowers, Distillation and Virtues thereof, *ibid.*
 — of the Frey of Frogs, Distillation, and Virtues thereof, *ibid.*
 — of Snails, Distillation and Virtues thereof, *ibid.*
 — Hungary, Distillation and Virtues thereof, *ibid.*
 — to appease the Pains of the Gout, Distillation and Virtues thereof, 863.
 — for the Eyes, a very good one, Distillation and Virtues thereof, 863, 864.
 — Milk, Pectoral of George Bateman, Distillation and Virtues thereof, 864.
 — to prevent the Accidents which may be occasioned by a Fright, or Fall of a Woman with Child, Distillation and Virtues thereof, 865.
 — for the Hairs, Distillation and Virtues thereof, *ibid.*
 Waved Camblots, in Weaving, Description thereof, 1202.
 WEAVING, different Manners thereof, 1200.
 — of Cloth, Process thereof, 1200, 1201.
 — Camblot, Process thereof, 1201.
 — Druggets, Process thereof, 1202.
 — Serge, Process thereof, *ibid.*
 Weavin

Weaving, Rateens; Process thereof, *ibid.*
 — Frizes; Process thereof, *ibid.*
 — Bays; Process thereof, *ibid.*
 — Say; Process thereof, *ibid.*
 — Ribbands; Process thereof, 1205.
 — Taffety; Process thereof, 1205, 1206.
 — Sattin; Process thereof, 1206.
 — Damask; Process thereof, *ibid.*
 — Brocade; Process thereof, *ibid.*
 — Mohair; Process thereof, *ibid.*
 — Velvet; Process thereof, *ibid.*
 — Linen-Cloth; Process thereof, 1207.
 Wedge, in Mechanicks; Description thereof, 379.
 — Principles whence it derives its Power, *ibid.*
 Welch Language, in Grammar; Remarks thereupon, 80.
 Welsted, M. his Sentiment on the Perfection of the English Language, in Grammar, 82.
 Wesley John, his Definition of Methodism; his Character as given to me by a Friend, 436, 437.
 Westminster School, by whom founded, 1195.
 Wheel, a Machine, in Mechanicks; two Sorts thereof, 377.
 — simple; Description and Theory thereof, 377, 378.
 — Aristotle, P. Touquet, and Dortus de Myran's Remarks thereupon, 378.
 — their Power, whence it results, *ibid.*
 Wheel dented; Description thereof, *ibid.*
 — their Power and Doctrine, *ibid.*
 Wheel, in Pottery; Description thereof, 980.
 — how managed, 980, 981.
 When, one of the Categories of Aristotle, in Logick, *ibid.*
 Where, one of the Categories of Aristotle, in Logick, *ibid.*
 Whigs, a formidable Party in England; their Origin and Distinction, 1121.
 — State Republicans; their Character and Maxims, *ibid.*
 — moderate State; their Character and Maxims, *ibid.*
 — Presbyterians; their Character and Principles, *ibid.*
 — De Coetlogon's Remarks thereupon, 1121, 1122.
 Whirl-wind, in Meteorology; Definition and divers Sorts thereof, 422.
 — distinguished by their particular Names, *ibid.*
 — Prester; Definition and History thereof, *ibid.*
 — Eucypias; Definition and History thereof, *ibid.*
 — Exhydria; Definition and History thereof, *ibid.*
 — Typho or Fortex, Definition and History thereof, *ibid.*
 — Hurricane; Definition and History thereof, *ibid.*
 Whitfield George; his Character, in Methodism; as given to me by a Friend, 436, 437.
 Whole, in Metaphysick; Definition and Division thereof, 405.
 — actual; Definition and Doctrine thereof, *ibid.*
 — potential; Definition and Doctrine thereof, 405, 406.
 Wild-Goat, in Hunting; History thereof, 198.
 — how hunted, *ibid.*
 Wilkins, Bishop; his Attempts for a general Character, in Grammar, 56.
 Will of God, in God and his Attributes; Definition and Division thereof, 29.
 — general; Definition and Doctrine thereof, *ibid.*
 — special; Definition and Sub-division thereof, *ibid.*
 — of Pleasure; Definition and Doctrine thereof, *ibid.*
 — of Sign; Definition and Doctrine thereof, *ibid.*
 — antecedent; Definition and Doctrine thereof, *ibid.*
 — consequent; Definition and Doctrine thereof, *ibid.*
 Will of God, the Cause of Things, 30.
 Wills of Christ, in Incarnation; two in Number, 248.
 — divine; Definition thereof, *ibid.*

Vol. II.

— human; Definition thereof, *ibid.*
 — what Kind of Subordination between both, 249.
 Will, human, in Metaphysick; Definition and Doctrine thereof, 415.
 William Kay, of Breda, a Painter of the Flemish School; his History and particular Talent, 781.
 William Baur, of Strasbourg, a Painter, of the Flemish School; his History and particular Talent, 785.
 William Dobson, of London, an English Painter; his particular Talent, 795.
 William of St. Amour, Dr. of Paris; his particular Sentiments, 158.
 Wind, in Meteorology; Definition thereof, 420.
 Winds, general, accounted for by Des Cartes, Robault, and Dr. Halley, *ibid.*
 — Phenomena of the general Trade-winds accounted for, 420, 421.
 — its Force and Velocity; Theory thereof, 421.
 — its Qualities and Effects, 421, 422.
 Winds, Division thereof, 422.
 — perennial, or constant; Definition and Doctrine thereof, *ibid.*
 — stated, or periodical; Definition and Doctrine thereof, *ibid.*
 — variable, or errattick; Definition and Doctrine thereof, 422.
 — general; Definition and Doctrine thereof, *ibid.*
 — particular; Definition and Doctrine thereof, *ibid.*
 Winds, in Navigation; their Number and Names, 586.
 Winds, regular, in Navigation; why thus called; where they blow; and in what Season, 595.
 Winds, called *Monsons*, by the Indians; where, and when they blow, *ibid.*
 Wind, Rain and Tempest, at Sea, their Fore-runners, as observed by Father Fournier, 597.
 Wind, in Pneumatics, Definition thereof, 959.
 Wind-mill, in Pneumatics, Construction and Apparatus thereof, *ibid.*
 — Theory of its Motion, *ibid.*
 — Elliptical, Theory thereof, 960.
 Wind-Instruments of the Antients, in Musick, 544.
 Wine Medicinal, in Pharmacy, Definition thereof, 825.
 — of Wormwood, Preparation and Virtues thereof, *ibid.*
 — of Mars, Preparation and Virtues thereof, *ibid.*
 — Magistral Purgative, Preparation and Virtues thereof, *ibid.*
 — Febrifuge, Preparation and Virtues thereof, *ibid.*
 — for the Hydropsy, Preparation and Virtues thereof, *ibid.*
 Witchcraft, a Sort of natural Magick, 363.
 — Theory thereof refuted by De Coetlogon, and his own Sentiment, 364.
 Wood carried to a Siege, in Gunnery, 98.
 Wolf, in Hunting, History thereof, 196.
 — how hunted, different Manner of doing it, 197.
 Wool, English, its Excellency, 1203.
 Woollen Manufacture, in England, its History, *ibid.*
 Word Divine, one of the Names of the second Person of the Trinity, Proofs thereof, 1182.
 — whence he proceeds, 1183.
 Words, in Grammar, how defined by Messieurs of Port Royal, 66.
 — Division thereof, *ibid.*
 — Primitive, Definition, Doctrine and Examples thereof, *ibid.*
 — Derivative, Definition, Doctrine and Examples thereof, *ibid.*
 — Equivocal, Definition, Doctrine and Examples thereof, *ibid.*
 — Synonymous, Definition, Doctrine and Examples thereof, *ibid.*
 — Remarks thereupon, *ibid.*
 — Figures thereof, in Rhetorick, 1013.
 Workmen carried to a Siege, in Gunnery, 98.
 Worship, Disparity thereof, when it dissolves Marriage, in Sacrament, 1031.

Writ: *quare impedit*, in Law, Definition and Rules thereof 302.
 — of Formedon, three Kinds thereof, *ibid.*
 — in the Defunder, Form thereof, *ibid.*
 — in the Remainder, Form and Rules thereof, *ibid.*
 — in the Reverter, Form thereof, *ibid.*
 — Remarks thereupon, *ibid.*
 — of Partition, in Law, Definition and Rules thereof, *ibid.*
 — of Replevin, Definition and Rules thereof, 303.
 — of Error, in Law, Definition and Doctrine thereof, 315.
 — of *precipe quod reddat*, Definition and Rules thereof, 316, 317.
 — of *Testatum*, Definition and Rules thereof, *ibid.*
 — of *non omittas*, Definition and Rules thereof, *ibid.*
 — Appearances thereupon, in the Common-Pleas, *ibid.*
 — of *scire facias*, Definition and Rules thereof, 318.
 — of *nisi prius*, Definition and Rules thereof, *ibid.*
 — of *Capias*, two Kinds thereof, *ibid.*
 — *ad Respondendum*, Definition and Rules thereof, *ibid.*
 — *Satisfaciendum*, Definition and Rules thereof, *ibid.*
 — *ad Proficiscendum*, Definition and Rules thereof, 319.

X.

X, a double Consonant, and the Twenty-second Letter of the English Alphabet, its Sound in the English and French, 63.
 — not known in the Hebrew, *ibid.*
 — its Signification among the numeral Characters of the Antients, 64.
 — its Signification, in Musick, 544.
 XEROPHAGIA, Definition and History thereof, 1207.

Y.

Y, the Twenty-third Letter of the English Alphabet, whence derived 63.
 — occasionally both a Vowel and a Consonant, *ibid.*
 — Use thereof, to what attributed, *ibid.*
 — how used by the Romans, 64.
 — how in the modern Languages, *ibid.*
 — its Signification among the numeral Characters of the Antients, *ibid.*
 Yard, Main, in Naval Architecture, Proportions thereof, 572.
 — of the Foremast, Proportions thereof, *ib.*
 — of the Mizzen-mast, Proportions thereof, *ibid.*
 — of the Boltsprit, Proportions thereof, *ibid.*
 — of the Main-top-mast, Proportions thereof, *ibid.*
 — of the Fore-top-mast, Proportions thereof, *ibid.*
 — of the Top-gallant of the Boltsprit, Proportions thereof, *ibid.*
 YAWNING, Definition and Theory thereof, 1208.
 YNCA, their History, 1209.

Z.

Z, the last Letter of the Alphabet, and one of the double Consonants, 64.
 — how pronounced, its Affinity with the Figure 9, *ibid.*
 — its Signification among the numeral Characters of the Antients, *ibid.*
 — its Signification in Musick, 544.
 Zampagna, Term of Musick, Signification thereof, *ibid.*
 Zephyrus, in Painting, how painted, 753.
 Zeuxis, a celebrated Painter among the Antients, his History and particular Talent, *ibid.*
 ZOOTOPIA, Definition and Treatise thereof, 1209.
 Zoppo, Term of Musick, Signification thereof, 544.
 Zuffolo, Term of Musick, *ibid.*

DIRECTIONS for the BINDER.

VOL. I.

F rontispiece to face the Title.	
Osteology,	_____
Sarcology,	_____
Myology and Angiology,	_____
Animals,	_____
Architecture,	_____
Army,	_____
Astronomy,	_____
Botany,	_____
Building,	_____
Chymistry,	_____
Dialling,	_____
Fortification,	_____
Geography,	_____
Geometry,	_____

pag.	43
	55
	105
	111
	162
	223
	255
	349
	389
	616
	866
	1012
	1073
	1186

VOL. II.

G lass-House,	_____	pag. 1
Gunnery,	_____	84
Heraldry,	_____	107
Hieroglyphicks,	_____	160
Hydraulicks,	_____	201
The Cut of Seals,	_____	275
Magnet,	_____	366
Mechanicks,	_____	375
Miscellanies,	_____	512
Musick,	_____	507
Natural History,	_____	554
Naval Architecture,	_____	569
Opticks,	_____	624
Perspective,	_____	802
Pneumatics,	_____	943
Refiners Shop,	_____	998
Surveying,	_____	1076
Tanners, Shop,	_____	1082
Weavers, &c,	_____	1201